

FORDING OPERATIONS

**OPEN FILE**SUMMARY REPORT OF 1970 EXPLORATION AND DEVELOPMENTGENERAL SUMMARY

In 1970 Fording Operations undertook an extensive program of exploration drilling to determine the potential for additional product coal in several areas adjacent to the Fording River sites under development. The upper seams were explored by drilling and by bulldozer trenching on the west face of Eagle Mt. and in the Greenhills Area. Three core holes tested the seams present on the west face of Castle Mt. Bulldozer trenching was also done along the near surface outcrops of several seams on Castle Mt. On the northwest flank of Mt. Turnbull, only limited bulldozer trenching was practical in the deep overburden, but two holes were drilled in this locality to test the upper seams. All core drilling was contracted by Canadian Longyear Ltd. Two model 44 drills were used until late September.

A sustained program of engineering-type rotary drilling was started in November 1969 and continued until near the end of 1970. During February, 4 truck mounted rotary rigs were in operation; 5 drills were employed in the first half of March. Becker Drills Ltd. center-return rotary drill was used throughout the year and provided contamination-free chip samples for analyses as well as accurate seam elevations. The engineering type drilling was mainly in the Greenhills Pit Area, but also included the North Greenhills Area, the West Turnbull Area and the Clode Pit Area. This type of drilling was done mainly to provide seam outlines for planning, although chip samples were collected from the center-return Becker drill. In the Clode Pit where deeper holes were required, four 100 diameter core holes were included in the Engineering-type drilling program.

The majority of drill holes completed since November 1969 were logged by gamma ray-neutron recordings to provide accurate seam elevations, seam correlations and a general measure of coal quality. Overburden casing was left in most holes to permit the radiation logging.

Drilling Summary

<u>Exploration Drilling</u>		All in 1970	
	Core	10,080.5	feet
	Rotary	4,790	"
	Sub-Total	14,870.5	feet
<u>Engineering Drilling</u>			
1970	( Core	3,731	feet
	( Rotary	38,546	"
			<u>42,277</u> feet
December 1969	Rotary	910	"
	Sub-Total	43,187	feet
December 1, 1969	Total Core Drilling	13,811.5	feet
to			
December 31, 1970	Total Rotary Drilling	44,246	feet

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

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11 EXPLORATION DRILLING

A Eagle Mt. Upper Seams (Seams 9 to 15 incl.)

Holes 303, 304, 305, 307 are HQ core holes totalling 2,829 feet. One additional hole, R.H. 308, was drilled as a rotary hole after the onset of winter conditions made it impractical to pump water all the way from Clode Creek. Section 489,500 shows the seams penetrated by holes 307, 308. Holes 303, 304, 305 tested the sequence including and below seam 13.

A preliminary feasibility study indicates that it will be economically feasible to mine the seams above No. 9, up to and including seam 15, possibly before the initial pit involving seams 4, 5, 7, 9 is mined along the west face of Eagle Mt. Coal quality is shown on sample record sheets accompanying the drill hole logs.

Hole 309 was an HQ core hole (343.5 ft.) drilled to test a tentative spoil area for future mining of these upper seams. Significant thicknesses of near surface coal were encountered in DDH.309. An alternate spoil area will be considered.

B Castle Mt.

Holes 400, 401, 402 were drilled for a total of 2,009 feet of HQ core. Hole 402 was drilled at -70 easterly to test the simple fold structure indicated by surface mapping and by holes 400, 401. Section 479,500N shows the structure. Because of the thin sheared seams encountered, and the generally unfavorable stripping ratios indicated, additional proposed drilling for Castle Mt. was diverted to the upper seam area of Eagle Mt. An extensive backlog of seam trench surveying and mapping was continued to improve the general structural picture. North of the section shown, the fold structure becomes complicated by faulting, as shown on the seam outcrop survey map, plates 12, 11.

C Greenhills Upper Seams (Seams F to H or I incl.)

Diamond drill holes 91, 92, 500 - 504 inclusive were primarily to indicate the general potential tonnages and mining feasibility. DDH.91 was abandoned at 192 feet when the drill rods became stuck in fractured sandstone near a suspected fault. DDH.92 only tested seams G, F and seams E, D below. DDH.500 - 504, except DDH.503, intersected sufficiently favourable sections that additional drilling was proposed to provide adequate data for a preliminary feasibility study of a northern block between Lat. 487,250N and 489,500N. DDH.503 was more or less a 'wildcat hole' to explore for upper seams closer to surface than the deep intersections of seams I, G, H in DDH.25. DDH.503 proved to be very disappointing in that 'H' and 'G' seams were too thin to be minable.

The preliminary intersections in the northern block (DDH.501, 504) were augmented by rotary holes 505 to 511 inclusive. A preliminary feasibility study indicates that an economic mining situation is possible for seams F to H inclusive and that mining of this upper block converts a substantial down-dip extension of the planned dragline pit to 'probable reserves'. Additional fill-in drilling is proposed for this northern area of upper seams in 1971. Rotary holes 512, 513 were drilled in November 1970 to test a tentative spoil area for an upper seam pit. These holes indicated that seams of significant thickness were absent above seam F in this locality. This confirms the intersections in DDH.23, 1400 feet south of R.H. 512, 513.

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C cont....

Sections 487,500N and 489,000N show the structure and mining possibilities. Faulting is present in the upper part of DDH.501 and west of the initially proposed upper seam pit. Some bulldozer trenching was done in this vicinity to clarify the near surface outcrop trace of seam H. This will be continued.

DDH.500, 502 tested another apparently favourable area of upper seams extending for several thousand feet north of Adit 10, and open to the South. Section 484,000N illustrates the potential here. This area requires several thousand feet of engineering-type drilling to detail the structure and the economic situation. Trenching has been done wherever the overburden is not too deep, on seams I, H, G (See plate 9, seam outcrop surveys).

D Northwest Flank of Mt. Turnbull

DDH.600, 601 were drilled on the northwest flank of Mt. Turnbull, to test the upper seams. An old top of seam trench and road was cleaned out along the south face of Mt. Turnbull, a few hundred feet above the new haul road. This trench is currently interpreted as along seam 12 although this was previously considered as seam 9. DDH.600 is interpreted from its radiation log to have intersected seams 14, 13, 12, upper 11, and 11, but these are generally less than 10 ft. thick. Trenching below DDH.601 indicates a downslope migration for the seam traces, consequently DDH.601 was collared further northward, above the projected extension of seam 12. Only 2 very narrow upper type seams were intersected in DDH.601. No further drilling is planned in this general area, except possibly in the potential pit area on the lower west flank of Mt. Turnbull.

III ENGINEERING TYPE DRILLING

A Clode Pit Area and Clode Creek 'Repetition Area'

DDH.300, 301, 302, 306 were relatively deep HQ core holes drilled to test all or at least most of the stratigraphic section planned for mining in the Clode Pit. Total footage involved in these 4 holes was 3,936 feet. The first hole drilled, DDH.300, intersected all seams from upper 11 to No. 4, approximately as expected. Holes 301, 302, 306 were generally as anticipated down to the base of seam 5. An anomalous, thick seam was intersected in each of these holes at slightly varying distances below normal No. 5. This lower seam has been interpreted as repeated 5 or lower 5 (a new seam) when several working hypotheses were considered. A completely satisfactory interpretation has not evolved to date, although it is also evident that normal seam 4 is not present below a thrust fault interpreted immediately below the anomalous 5 seam in these holes, although various other seams are repeated below this thrust fault.

Trenching in the Repetition Area immediately south of Clode Creek has revealed repetition at surface of seams 4, 2, 1. Rotary holes 310, 311 were drilled in this area; No. 310 to obtain a fresh sample at relatively shallow depth, and 311 to intersect a 'blind' occurrence of seam 5 at depth below the thrust fault responsible for the 'repetition'.

Further engineering-type drilling is proposed in January 1971 to provide additional intersections to aid the structural interpretation in the Clode Pit. Clode Creek section thru' holes 312 and 301 illustrates the tentative interpretation.

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## B Greenhills Pit Area

In the proposed Greenhills Pit Area 65 rotary holes (total 21,274 feet) were drilled for seam outlines to provide data for pit planning. Almost all holes were radiation logged and about 2/3 of them were drilled with double-walled center return rotary equipment to provide representative chip samples. Top of seam contours were revised periodically as the drilling information became available, and additional fill-in holes were located as required. The main pit contains virtually no seam outcrops. Seam "F" has been exposed by bulldozer trenching for 1,500 feet of strike length north of 487,000N latitude, but east of this relatively deep overburden masks all bedrock. Many significant variations from the expected seam outlines and structure were revealed by the highly essential engineering-type drilling. Holes 162, 515, 159, 158 served to delineate the Ericson Fault which forms the east boundary of the pit at its northern end.

Eight rotary holes were drilled in the North Greenhills Area, to the east of the main Ericson Fault on the south end of Lake Mt. Seam correlations were greatly improved and coal quality tests were done on the samples obtained. The drilling results to date have not substantiated an economic mining situation in this area.

Sections 487,500N and 489,000N are indicative of the Greenhills Pit Area, and section E-E shows the structure across part of the North Greenhills area.

## C West Turnbull Area

Twenty-five rotary engineering-type holes were drilled in this area, mainly in February and March 1970. Total drilled footage was 10,697 feet. About  $\frac{1}{2}$  of the holes were drilled by Becker Drills Ltd. and were sampled, but these were mainly Holes 202 - 209 inclusive, towards the southern end of the area. Radiation logging was done in all the holes that remained open. Correlations are good and have been substantially aided by the interpretations in the 'Repetition Area' west of the Clode Pit.

A tentative pit area has been outlined on the lower west flank of Mt. Turnbull, as outlined on prints of plates 2,22. The stripping ratio is within economic limits but the large tonnages of waste rock to be hauled uphill from the pit impose an unbearable cost on the overall economics. For this reason, the potential tonnage is currently considered as 'probable reserves' until further mining studies are made. Three sections are included in the appendix to illustrate the West Turnbull Area.

## IV BULLDOZER TRENCHING, MAPPING, SURVEYING

Top of seam and exploratory trenching done in 1970 totalled 80,000 feet. Only a minor part of this consisted of cleaning old, sloughed trenches. Two rental 'dozers were supplied by W.A. Cook & Sons of Pincher Creek, Alberta for the period February through to the end of September. These were D-8 'dozers provided for most of this period. Lemaster Lumber Company of Cranbrook, B.C. supplied an additional machine, a D-7, from August 17 until November 13. From September 30 to year end Cook & Sons supplied 1 machine, a D-7E. The various bulldozers built the drill access roads and drill sites, cleared the roads of snow and mud as required, and were used to move the Longyear skid mounted diamond drill rigs and to assist the truck mounted rotary drills when road conditions prevented them from moving under their own power.

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312

IV cont.....

From December 1, 1969 until May 1, 1970, the geological field staff consisted of a junior geologist and an experienced technician supervised by the mine geologist. From May 1 until approximately September 1, another graduate geologist was employed as a temporary employee. During this peak of the exploration season, two students were employed to assist with the core logging, sampling, record keeping, etc. Two survey parties were used nearly full time to survey drill holes, seam trenches and geological points.

V PROXIMATE ANALYSES, TEST WORK

Assaying and testing facilities were provided at the Sullivan Concentrator, Kimberley. Development engineer S.J. Bonny was a full time supervisor for analyses and test work done on rotary drill chip samples, diamond drill hole core samples and various oxidized coal samples taken from seam exposures on the new Clode Pit haul road. A metallurgical technician, a lead hand flotation operator and a labourer were used for the various crushing, blending, screening and flotation tests done on the respective samples. Assaying was done on the intermediate and final products at the Concentrator assay laboratory. The procedures followed for the separate types of samples are indicated on the accompanying charts, pages a to d inclusive. Washability reports were issued for each hole, and include proximate analyses. For the oxidized coal samples, percentage ash, B.T.U. values and Free Swelling Indices were reported.

VI EXPENDITURES

A. EXPLORATION Pre 1970 Program

Phases 1, 2, 3, 4, 5, 7	Cumulative Total	\$450,114
Codes C971.1110 - 1170 incl. (Job Cost Analysis, sheet 3 - December 1970)		
Less expenditures to November 30, 1969 - affidavit of expenditures for 1969 submitted December 29, 1969		<u>-390,067</u>
Balance applicable to 1970 summary of work		\$ 60,047

B. ENGINEERING DRILLING 1970 Program, C971.2110 - .2600 (Job Cost Analysis Sheets 3, 4 - December 1970)

Rotary Drilling	\$342,878	
Diamond Drilling	52,663	
Gamma Ray Logging	17,561	
Bulldozer Rental	72,740	
Drilling Supervision	12,171	
Board & Expense Accts.	30,370	
Test Work & Assaying	<u>33,084</u>	<u>\$561,467</u>

C. EXPLORATION AND DEVELOPMENT FOR ADDITIONAL PRODUCT COAL, 1970 PROGRAM

(Job Cost Analysis Sheets 2, 3 C972.1110 - .2600 incl.)

Corehole Drilling	\$206,524	
Rotary Drilling	14,413	
Gamma Ray Logging	-- ( 6,260	
	-- ( 953	
Bulldozer Rental	55,892	
Superv. & Surveying	-- ( 850	
	-- ( 24,978	
Board & Expense Accts.	( 16,221	
	( 4,348	
Test Work, Assaying	31,206	
Vehicle Mtce.	<u>31</u>	<u>\$361,676</u>

312

TOTAL EXPENDITURES REPORTED = \$983,190  
(November 30, 1969 to December 31, 1970 )

APPENDIX

Drill Hole Logs

Revised by gamma ray-neutron logs when these are available.  
Raw and Clean Coal Proximate Analysis included for sampled  
holes, also clean coal recoveries reported.

110

Plates

- Prints of 200 scale topographic plates showing all drill holes, seam outcrop surveys, special sections, etc.
- ✓ Nos. 1, 5, 9 ✓ cover North Greenhills and Greenhills Pit Areas.
- Nos. 2, 22 ✓ cover West Turnbull Area; plates 3, 7 ✓ cover Clode Pit and Eagle Mt. Castle Mt. data is on plates 11, 12. ✓
- ✓ General Geological Map, Scale 1 in. = 1000 feet. ✓

Sections

Greenhills Pit & Upper Seams

- ✓ 484,000N; ✓ 487,500N; 489,000N ✓

North Greenhills

- ✓ Section E E ✓

Clode Pit

- ✓ Section 494,500N ✓
- ✓ Section thru' holes 312, 301 ✓
- ✓ Section thru' 302 at N60° E ✓

Eagle Mt. Upper Seams

- ✓ Section 489,500N ✓

Castle Mt.

- Section thru' holes 400, 401, 402 ✓

West Turnbull

- ✓ Sections 500,000N ✓
- ✓ Sections thru' holes 46, 120, 70, 121 ✓
- ✓ Sections thru' holes 126, 70, 82 ✓
- ✓ Section C (Approx. 76,800E) ? ✓
- ✓ Section 500,600N ✓

Job Cost Analysis Sheets

To verify the expenditures listed.

Testing Procedures for Types of Samples

(4 flowsheet diagrams) a to d

Submitted by:

A.C. Taplin

A.C. Taplin  
Mine Geologist  
Fording Operations

ACT/eps

February 8, 1971

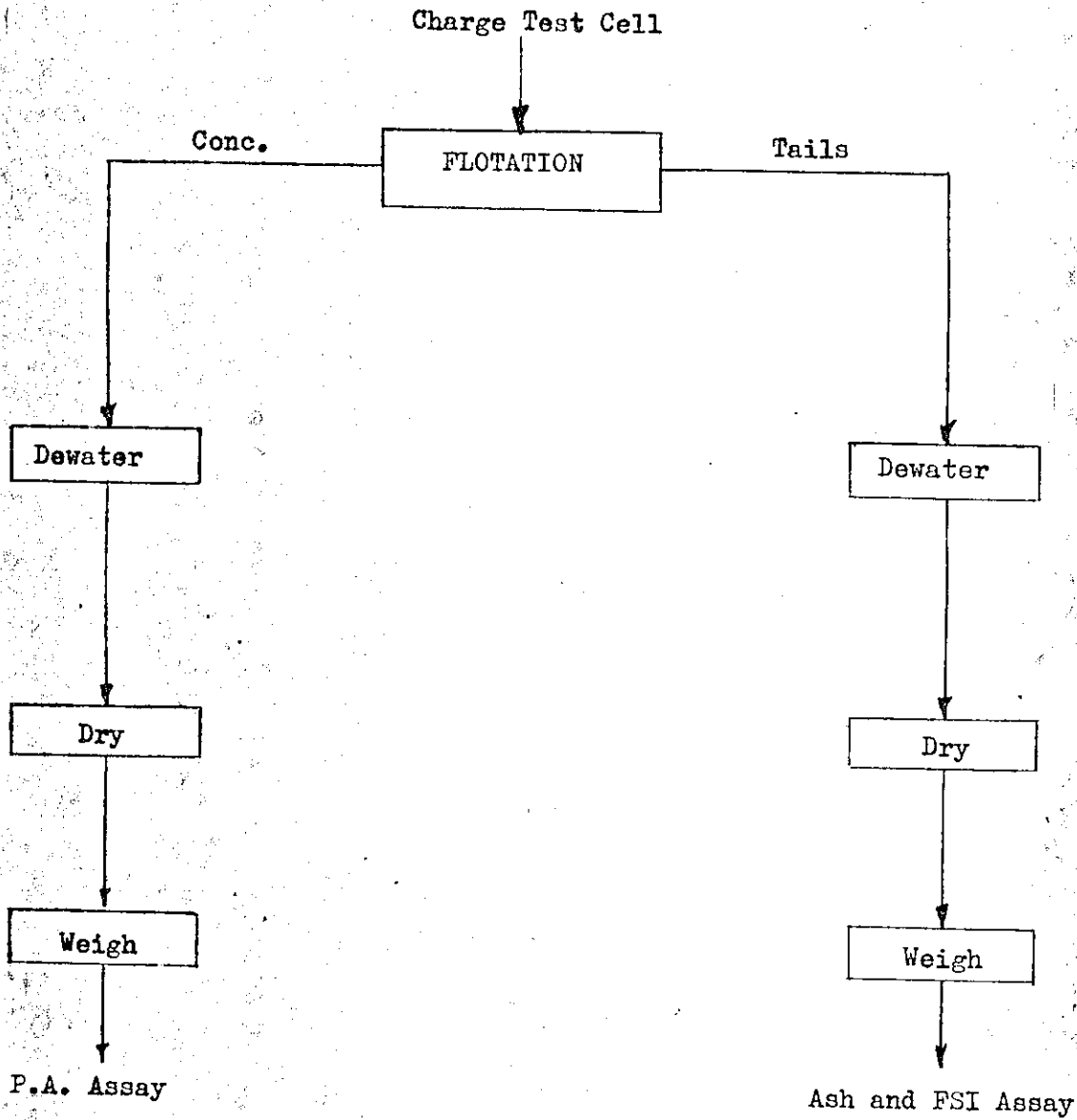
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FORDING COAL OPS.

FLOTATION PROCEDURE

*Rec'd from A. Taylor  
10/9/72*



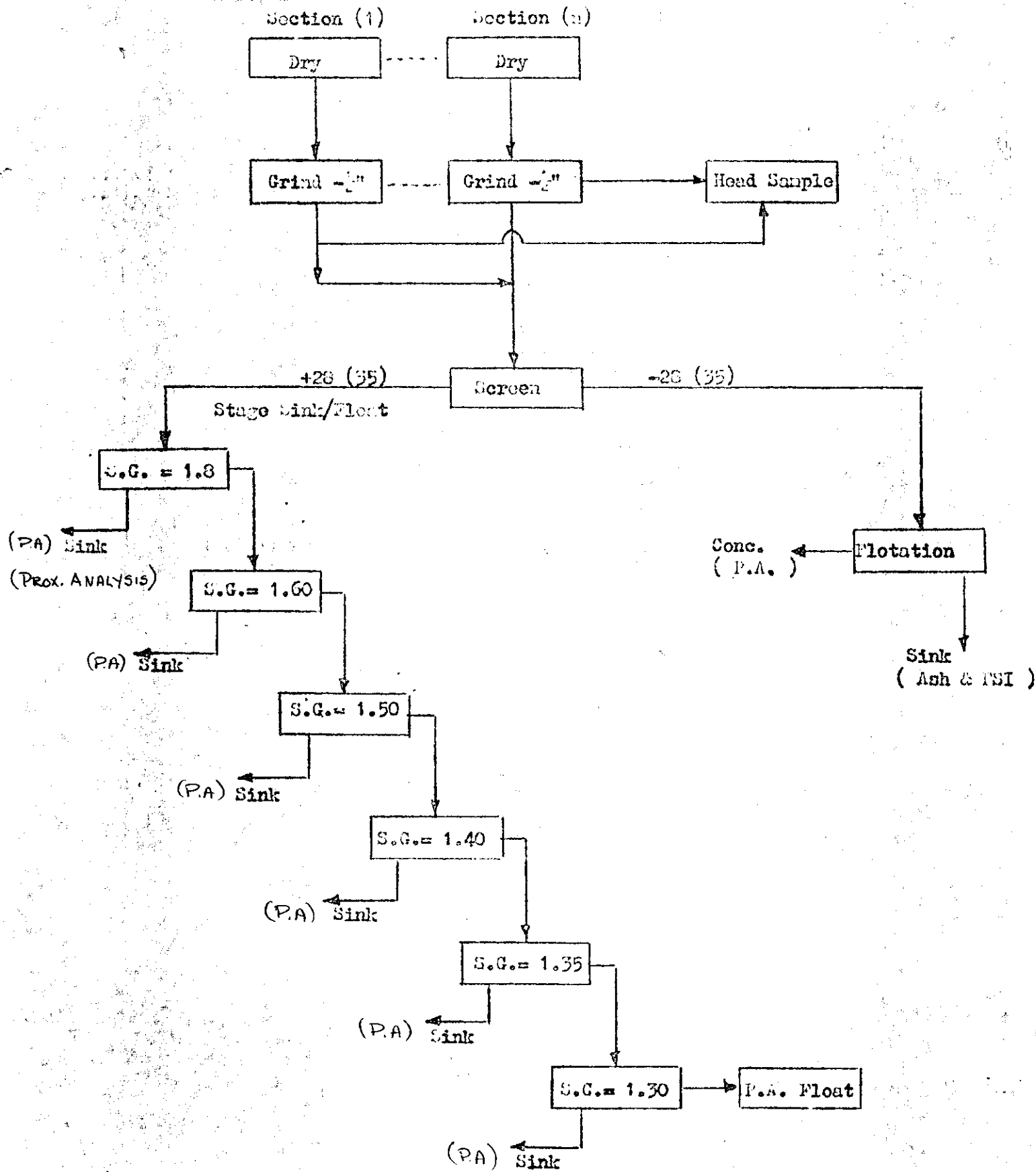
PROCEDURE:

- (1). Separate 500 gm. sample from -28 (35) mesh coal.
- (2). Charge 5 litre Denver test cell.
- (3). Condition for 2 min. with .05 cc. M.I.B.C.
- (4). Flotation time - 3 min.
- (5). Condition for 1 min. with 1 drop Cresylic acid.
- (6). Flotation time - 1 min.
- (7). Dewater, dry, and weigh both products.
- (8). Submit for assays; P.A. on conc., Ash & FSI for tails.

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PONDING COAL OFS.

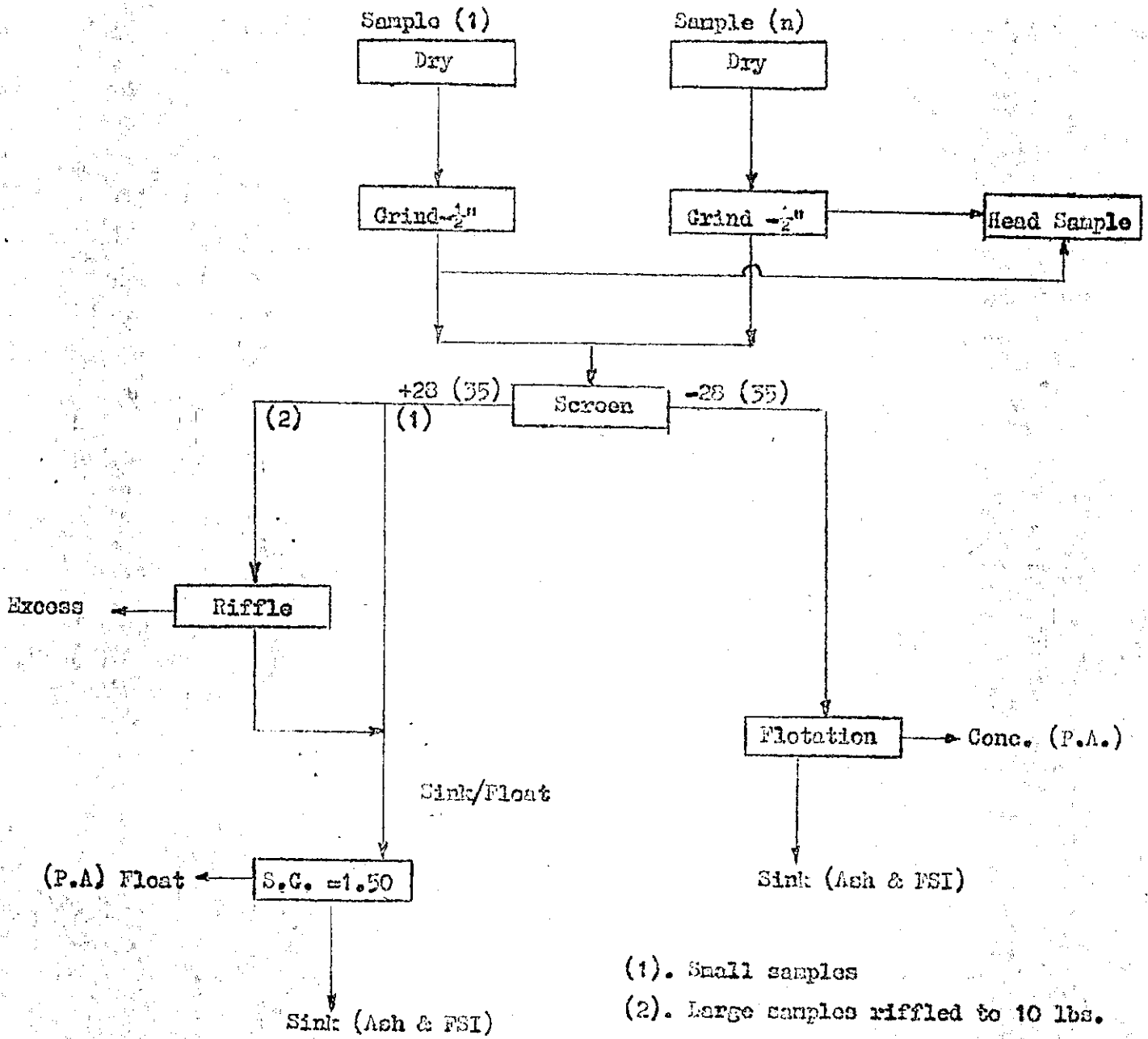
DIAMOND DRILL CORE PREPARATION FLOW SHEET





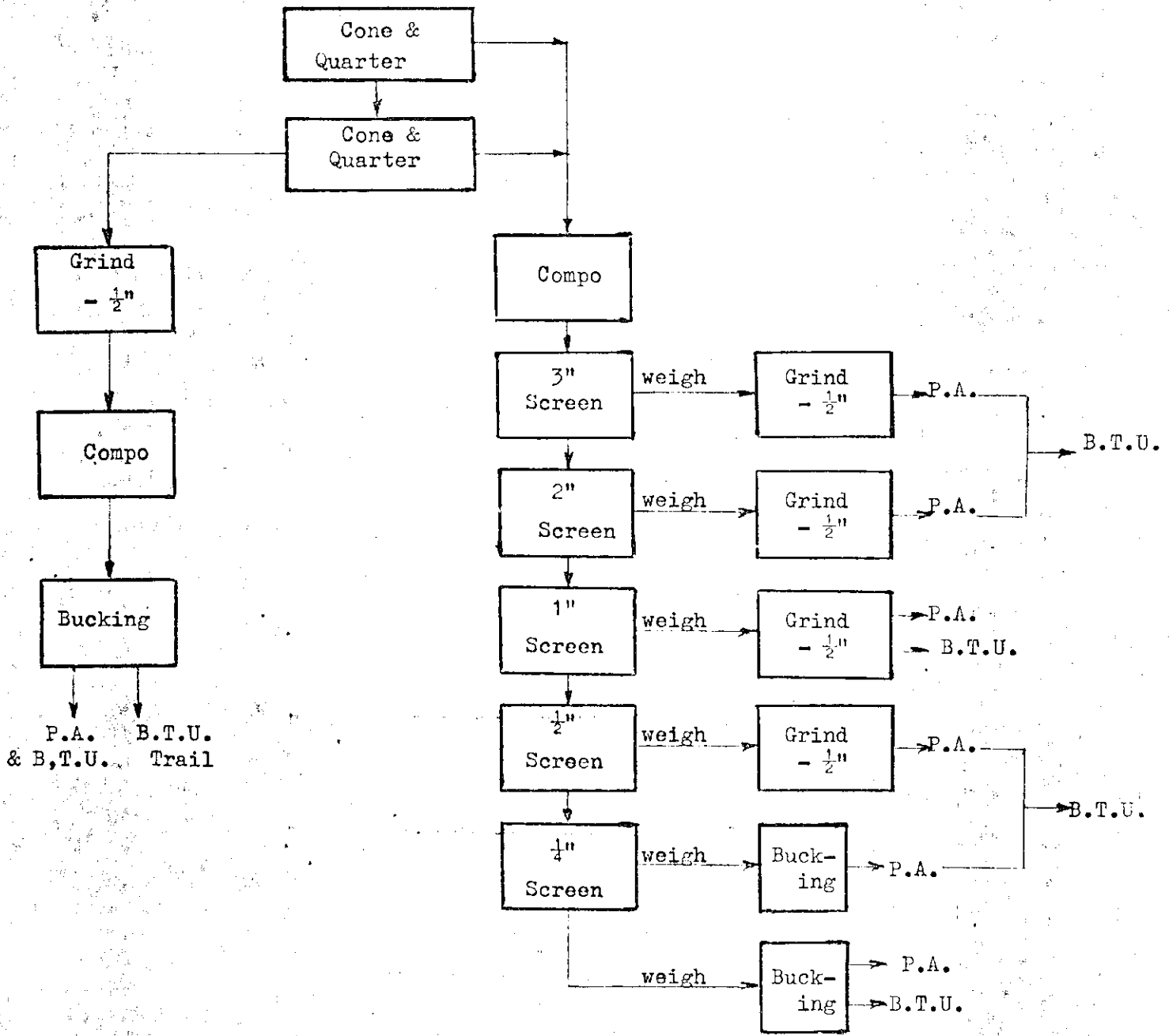
WORDING COAL OPS.

ROTARY CHIP PREPARATION FLOW SHEET



FORDING COAL OPS.

TEST PROCEDURE FOR OXIDIZED COAL.



PROCEDURE:

- (1). Cone and quarter each section into two lots (.25/.75).
- (2). Grind the smaller lot to - 1/2" and submit to bucking room. Assay for B.T.U. value and P.A. (Assay on composite according to footages.)
- (3). Compo larger lot according to footages and screen through series indicated above.
- (4). Weigh each fraction and grind to - 1/2".
- (5). Submit each fraction for proximate analysis and B.T.U. determination.

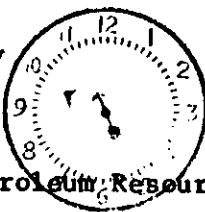
82-5-2

*Mr. James  
your approval  
and comments  
as to accuracy of report and  
costs in amount of \$983,190*

FORDING OPERATIONS

CAN PAC

*[Signature]*



Department of Mines and Petroleum Resources  
VICTORIA, B. C.

DEPT. OF MINES  
AND PETROLEUM RESOURCES

26 February 1971

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C.C.C.	<input checked="" type="checkbox"/>
C.C.	
D.C.C.	
D.A.	
R. I.	
C.P.E.	
ARC	3/3 <i>[initials]</i>
FILING CLERK	

**SUMMARY REPORT**

Attention: Mr. R. H. McCrimmon, Chief Gold Commissioner

- SECOND COPY -

Dear Mr. McCrimmon:

Re: Coal Licences 314-364 incl., 419, 420, 507-511 incl., 536-538  
incl., and 554-560 incl. <sup>9.5</sup> <sup>5.12</sup> <sup>5.12</sup> <sup>17.9</sup> <sup>3.12</sup> 30.1

Please find enclosed a comprehensive summary report of drilling, trenching, mapping and analyses covering the exploration and development program carried out on the subject coal licences during the period December 1, 1969, to December 31, 1970. Accompanying the report is an affidavit of expenditures for this period in the amount of \$983,190 which we request be credited to the current balance of excess work for the account of CanPac Minerals Limited. By copies of this letter and report, we are advising CanPac Minerals of development completed on their licences since November 30, 1969, which was an arbitrary cutoff date to accommodate the December 1969 work submission.

The 1970 development drilling program was designed to provide detailed information for pit planning and scheduling at the Clode Creek area on the north end of Eagle Mountain and at the Greenhills area west of the Fording River. In addition, some very preliminary pit outlining was accomplished in the West Turnbull area. Mine planning is presently underway for the proposed Clode and Greenhills pits, each expected to produce half of our annual requirement to begin with.

The exploration drilling program was designed to determine the potential for additional product coal in several areas adjacent to the main plant, namely on the upper portions of Eagle, Castle Mountain, in the upper Greenhills area, and on the northwest flank of Mt. Turnbull. The upper Greenhills seam testing proved encouraging and further drilling is currently underway to better define the structure and reserves.

*51-532/8*

312

Continued . . .

Page 2/Mr. McCrimmon/26 February 1971/Cominco Ltd.

The general construction and design activities reached a peak by year end. Steel erection for the maintenance-shop complex and process plant progressed well, general office framing was completed, ancillary plant excavations were well advanced, and substantial building activity is continuing through the winter. Major construction of services in 1970 included completion of main mine haul roads, Clode in-pit haul road, power line installation, first stage residential development at Boivin Creek in the Elk Valley, plus a start on construction of the permanent road servicing the project. Assembly of heavy mine equipment was substantial and is continuing including the erection of a 60 cubic yard dragline. In addition, the C. P. Rail contractor made steady progress on clearing and grading for the 34-mile spur line north from Sparwood.

We trust all data will be treated confidentially and if any further questions arise please do not hesitate to contact me.

Yours truly,



O. I. Johnson  
General Superintendent

OLJ:ss  
Enclosure

FORDING OPERATIONS

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I GENERAL SUMMARY

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## B Greenhills Pit Area

In the proposed Greenhills Pit Area 65 rotary holes (total 21,274 feet) were drilled for seam outlines to provide data for pit planning. Almost all holes were radiation logged and about 2/3 of them were drilled with double-walled center return rotary equipment to provide representative chip samples. Top of seam contours were revised periodically as the drilling information became available, and additional fill-in holes were located as required. The main pit contains virtually no seam outcrops. Seam "F" has been exposed by bulldozer trenching for 1,500 feet of strike length north of 487,000N latitude, but east of this relatively deep overburden masks all bedrock. Many significant variations from the expected seam outlines and structure were revealed by the highly essential engineering-type drilling. Holes 162, 515, 159, 158 served to delineate the Ericson Fault which forms the east boundary of the pit at its northern end.

Eight rotary holes were drilled in the North Greenhills Area, to the east of the main Ericson Fault on the south end of Lake Mt. Seam correlations were greatly improved and coal quality tests were done on the samples obtained. The drilling results to date have not substantiated an economic mining situation in this area.

Sections 487,500N and 489,000N are indicative of the Greenhills Pit Area, and section E-E shows the structure across part of the North Greenhills area.

## C West Turnbull Area

Twenty-five rotary engineering-type holes were drilled in this area, mainly in February and March 1970. Total drilled footage was 10,697 feet. About 1/2 of the holes were drilled by Becker Drills Ltd. and were sampled, but these were mainly Holes 202 - 209 inclusive, towards the southern end of the area. Radiation logging was done in all the holes that remained open. Correlations are good and have been substantially aided by the interpretations in the 'Repetition Area' west of the Clode Pit.

A tentative pit area has been outlined on the lower west flank of Mt. Turnbull, as outlined on prints of plates 2,22. The stripping ratio is within economic limits but the large tonnages of waste rock to be hauled uphill from the pit impose an unbearable cost on the overall economics. For this reason, the potential tonnage is currently considered as 'probable reserves' until further mining studies are made. Three sections are included in the appendix to illustrate the West Turnbull Area.

## IV BULLDOZER TRENCHING, MAPPING, SURVEYING

Top of seam and exploratory trenching done in 1970 totalled 80,000 feet. Only a minor part of this consisted of cleaning old, sloughed trenches. Two rental 'dozers were supplied by W.A. Cook & Sons of Pincher Creek, Alberta for the period February through to the end of September. These were D-8 'dozers provided for most of this period. Lemaster Lumber Company of Cranbrook, B.C. supplied an additional machine, a D-7, from August 17 until November 13. From September 30 to year end Cook & Sons supplied 1 machine, a D-7E. The various bulldozers built the drill access roads and drill sites, cleared the roads of snow and mud as required, and were used to move the Longyear skid mounted diamond drill rigs and to assist the truck mounted rotary drills when road conditions prevented them from moving under their own power.

cont.....



IV cont.....

From December 1, 1969 until May 1, 1970, the geological field staff consisted of a junior geologist and an experienced technician supervised by the mine geologist. From May 1 until approximately September 1, another graduate geologist was employed as a temporary employee. During this peak of the exploration season, two students were employed to assist with the core logging, sampling, record keeping, etc. Two survey parties were used nearly full time to survey drill holes, seam trenches and geological points.

V PROXIMATE ANALYSES, TEST WORK

Assaying and testing facilities were provided at the Sullivan Concentrator, Kimberley. Development engineer S.J. Bonny was a full time supervisor for analyses and test work done on rotary drill chip samples, diamond drill hole core samples and various oxidized coal samples taken from seam exposures on the new Clode Pit haul road. A metallurgical technician, a lead hand flotation operator and a labourer were used for the various crushing, blending, screening and flotation tests done on the respective samples. Assaying was done on the intermediate and final products at the Concentrator assay laboratory. The procedures followed for the separate types of samples are indicated on the accompanying charts, pages a to d inclusive. Washability reports were issued for each hole, and include proximate analyses. For the oxidized coal samples, percentage ash B.T.U. values and Free Swelling Indices were reported.

VI EXPENDITURES

A. EXPLORATION Pre 1970 Program (January 1 to December 31, 1969)

Phases 1, 2, 3, 4, 5, 7	Cumulative Total	\$450,114
Less expenditures to November 30, 1969 - affidavit of expenditures for 1969 submitted December 29, 1969		<u>-390,067</u>
Balance applicable to 1970 summary of work		\$ 60,047-

B. ENGINEERING DRILLING 1970 Program, (January 1 to December 31, 1970)

Rotary Drilling	\$342,878	
Diamond Drilling	52,663	
Gamma Ray Logging	17,561	
Bulldozer Rental	72,740	
Drilling Supervision	12,171	
Board & Expense Accts.	30,370	
Test Work & Assaying	<u>33,084</u>	<u>\$561,467</u>

C. EXPLORATION AND DEVELOPMENT FOR ADDITIONAL PRODUCT GOAL, 1970 PROGRAM (January 1 to December 31, 1970)

Corehole Drilling	\$206,524	
Rotary Drilling	14,413	
Gamma Ray Logging	-- ( 6,260	
	-- ( 953	
Bulldozer Rental	55,892	
Superv. & Surveying	-- ( 850	
	-- ( 24,978	
Board & Expense Accts.	( 16,221	
	( 4,348	
Test Work, Assaying	31,206	
Vehicle Mtce.	<u>31</u>	<u>\$361,676</u>

TOTAL EXPENDITURES REPORTED = \$983,190  
(November 30, 1969 to December 31, 1970 )

561,467  
361,676  
923,143

A P P E N D I X

Drill Hole Logs

Revised by gamma ray-neutron logs when these are available.  
Raw and Clean Coal Proximate Analysis included for sampled  
holes, also clean coal recoveries reported.

Plates

Prints of 200 scale topographic plates showing all drill  
holes, seam outcrop surveys, special sections, etc.  
Nos. 1, 5, 9 cover North Greenhills and Greenhills Pit Areas.  
Nos. 2, 22 cover West Turnbull Area; plates 3, 7 cover Clode  
Pit and Eagle Mt. Castle Mt. data is on plates 11, 12.

General Geological Map, Scale 1 in. = 1000 feet.

Sections

Greenhills Pit & Upper Seams

484,000N; 487,500N; 489,000N

North Greenhills

Section E E

Clode Pit

Section 494,500N

Section thru' holes 312, 301

Section thru' 302 at N60° E

Eagle Mt. Upper Seams

Section 489,500N

Castle Mt.

Section thru' holes 400, 401, 402

West Turnbull

Sections 500,000N

Sections thru' holes 46, 120, 70, 121

Sections thru' holes 126, 70, 82

Section C (Approx. 76,800E)

Section 500,600N

Expenditure Affidavit

To verify the expenditures listed.

Testing Procedures for Types of Samples

(4 flowsheet diagrams) a to d

Submitted by:

A.C. Taplin  
A.C. Taplin  
Mine Geologist  
Fording Operations

ACT/eps

February 8, 1971

CANADA

PROVINCE OF BRITISH COLUMBIA

TO WIT:

)  
)  
)  
)

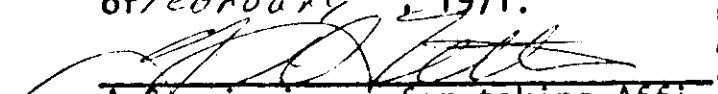
IN THE MATTER OF The Coal  
Act and CanPac Minerals  
Limited

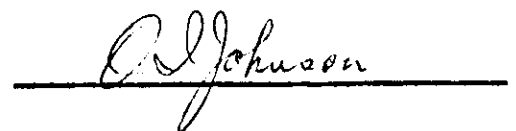
I, OSCAR IRWIN JOHNSON, of Elkford, approximately 25 miles north of Natal, British Columbia, Professional Engineer, make oath and say:

1. That I am General Superintendent of Fording Operations with Cominco Ltd. which has entered into an agreement with CanPac Minerals Limited to develop and mine the coal licences owned by CanPac Minerals Limited described on the Schedule annexed hereto and marked Exhibit "A" to this my affidavit.
2. That I have been advised by John Robert Barr, Controller of Fording Coal Limited, and verily believe that the sum of \$983,190.00 was expended by Fording Coal Limited on the CanPac coal licences set out in Exhibit "A" between the 1st day of December, 1969 and the 31st day of December, 1970.
3. That CanPac Mineral Limited desire to group all the coal licences set out in Exhibit "A" under the provisions of subsection (3) of Section 7 of the Coal Act being Chapter 60 of the Revised Statutes of British Columbia.

AND I make this solemn declaration conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

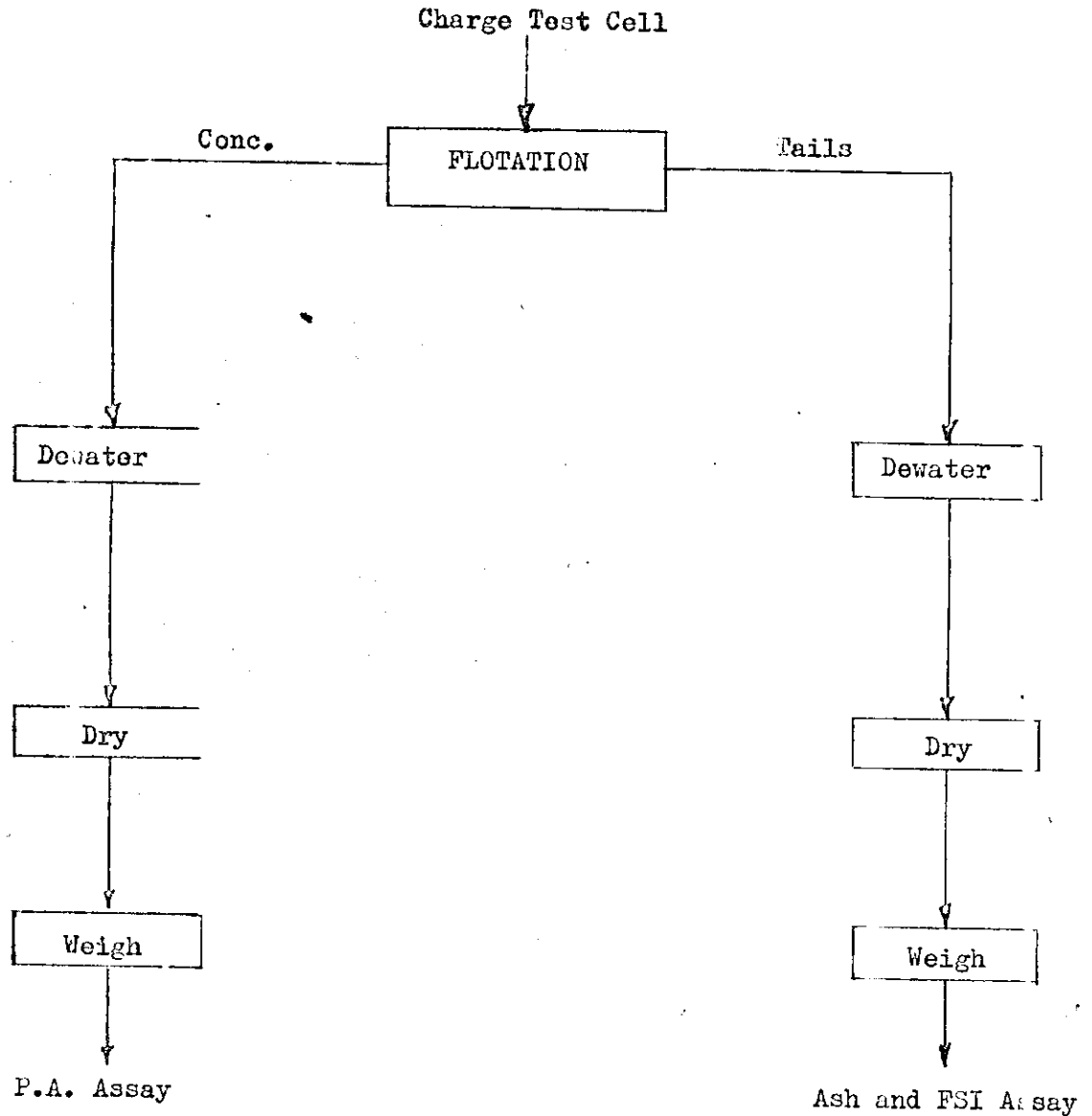
DECLARED before me at the City )  
of Trail, in the Province of )  
British Columbia, this 24<sup>th</sup> day )  
of February, 1971.

  
A Commissioner for taking Affi-  
davits for British Columbia



FORDING COAL OPS.

FLOTATION PROCEDURE



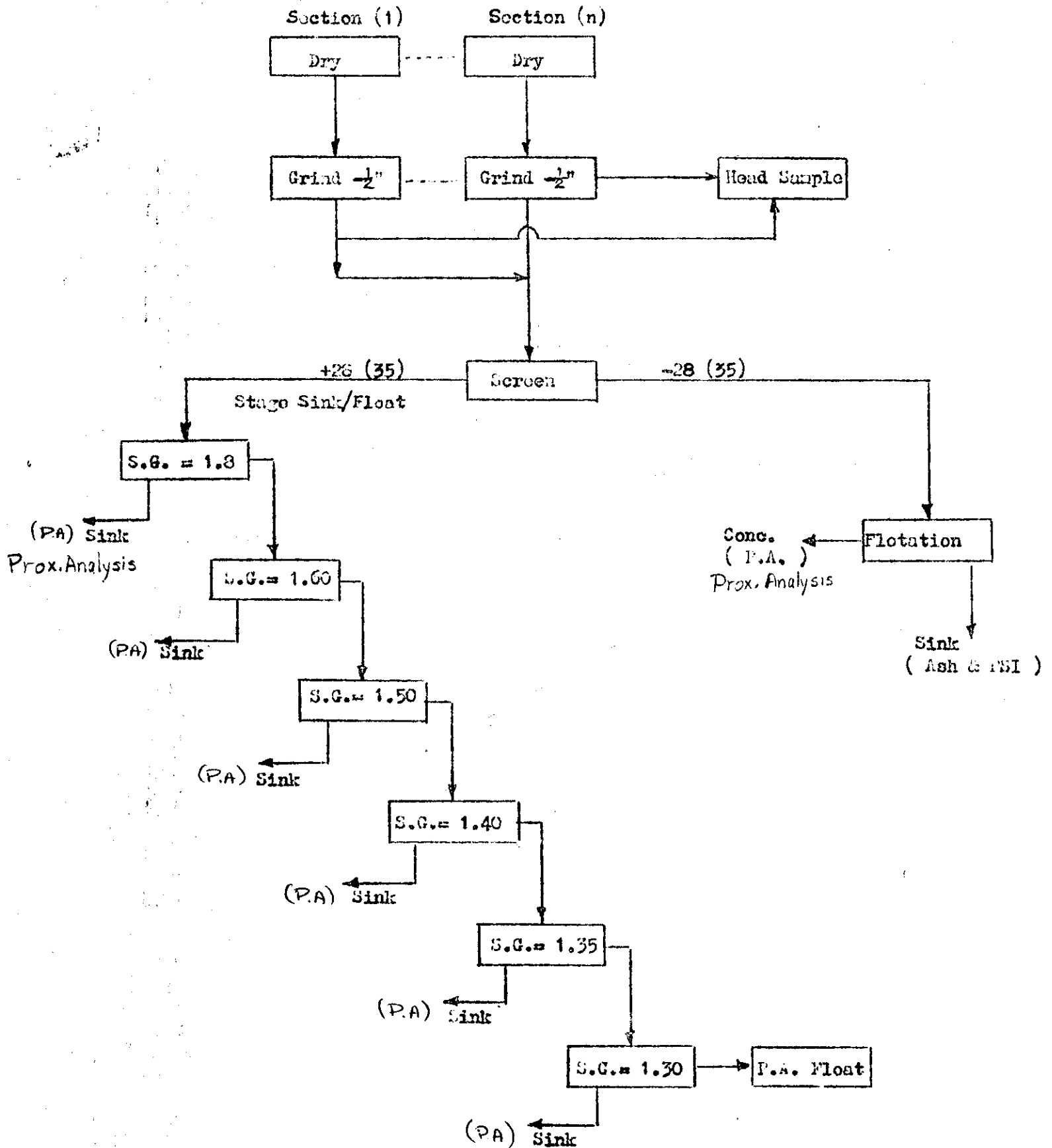
PROCEDURE:

- (1). Separate 500 gm. sample from -28 (35) mesh coal.
- (2). Charge 5 litre Denver test cell.
- (3). Condition for 2 min. with .05 cc. M.I.B.C.
- (4). Flotation time - 3 min.
- (5). Condition for 1 min. with 1 drop Cresylic acid.
- (6). Flotation time - 1 min.
- (7). Dewater, dry, and weigh both products.
- (8). Submit for assays; P.A. on conc., Ash & FSI for tails.

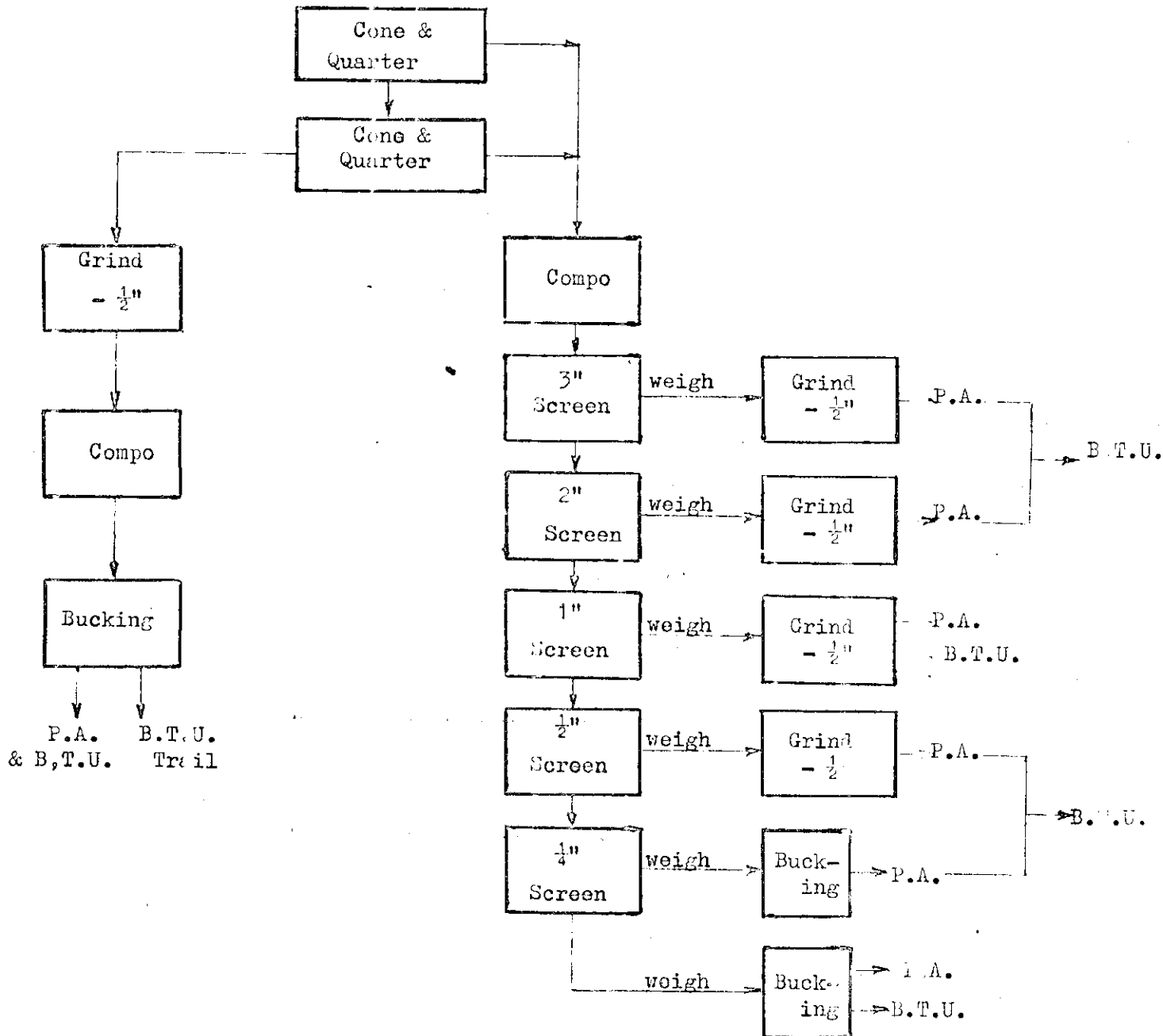
312

FORDING COAL CoS.

DIAMOND DRILL CORE PREPARATION FLOW SHEET



FORDIN COAL OPS.  
TEST PROCEDURE FOR OXIDIZED COAL.



PROCEDURE:

- (1). Cone and quarter each section into two lots (.25/.75).
- (2). Grind the smaller lot to  $-\frac{1}{2}$ " and submit to bucking room. Assay for B.T.U. value and P.A. (Assay on composite according to footages.)
- (3). Compo larger lot according to footages and screen through series indicated above.
- (4). Weigh each fraction and grind to  $-\frac{1}{2}$ ".
- (5). Submit each fraction for proximate analysis and B.T.U. determination.

*d*

312



FORDING OPERATIONS

Department of Mines and Petroleum Resources  
Parliament Buildings  
VICTORIA, B. C.

26 February 1971

Attention: Mr. R. H. McCrimmon, Chief Gold Commissioner

Dear Mr. McCrimmon:

Re: Coal Licences 801-804 incl., 943, 944, and 964

Further to the provisos of the subject coal licences held by Fording Coal Limited please be advised that no work was carried out on these licences during the past year relative to their respective anniversary dates.

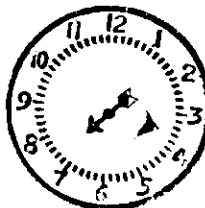
Yours truly,

2684

O. I. Johnson  
General Superintendent

OLJ:ss  
C.L.# 801-804 renewed to 8/12/71 } at 50%  
C.L.# 943-944 renewed to 18/12/71 } per case.  
C.L.# 964 renewed to 20/2/72  
AMB 3/3

MAR 2 71 PM



DEPT. OF MINES  
AND PETROLEUM RESOURCES

RECEIVED	
D. M.	
C.G.C.	✓
C.C.	
D.C.G.C.	
D.C.C.	
ACCTS.	
C.M.E.	
C.A.	✓
R. T.	
C.P.E.	
ARC	✓ 3/3 JMB
FILED CLERK	

SCHEDULE

Coal Licences situate in the Kootenay Land District  
in the name of CANPAC MINERALS LIMITED:

Licences 314 to 364 (inclusive)


Licences 419 and 420

Licences 507 to 511 (Inclusive)

Licences 536 to 538 (Inclusive)

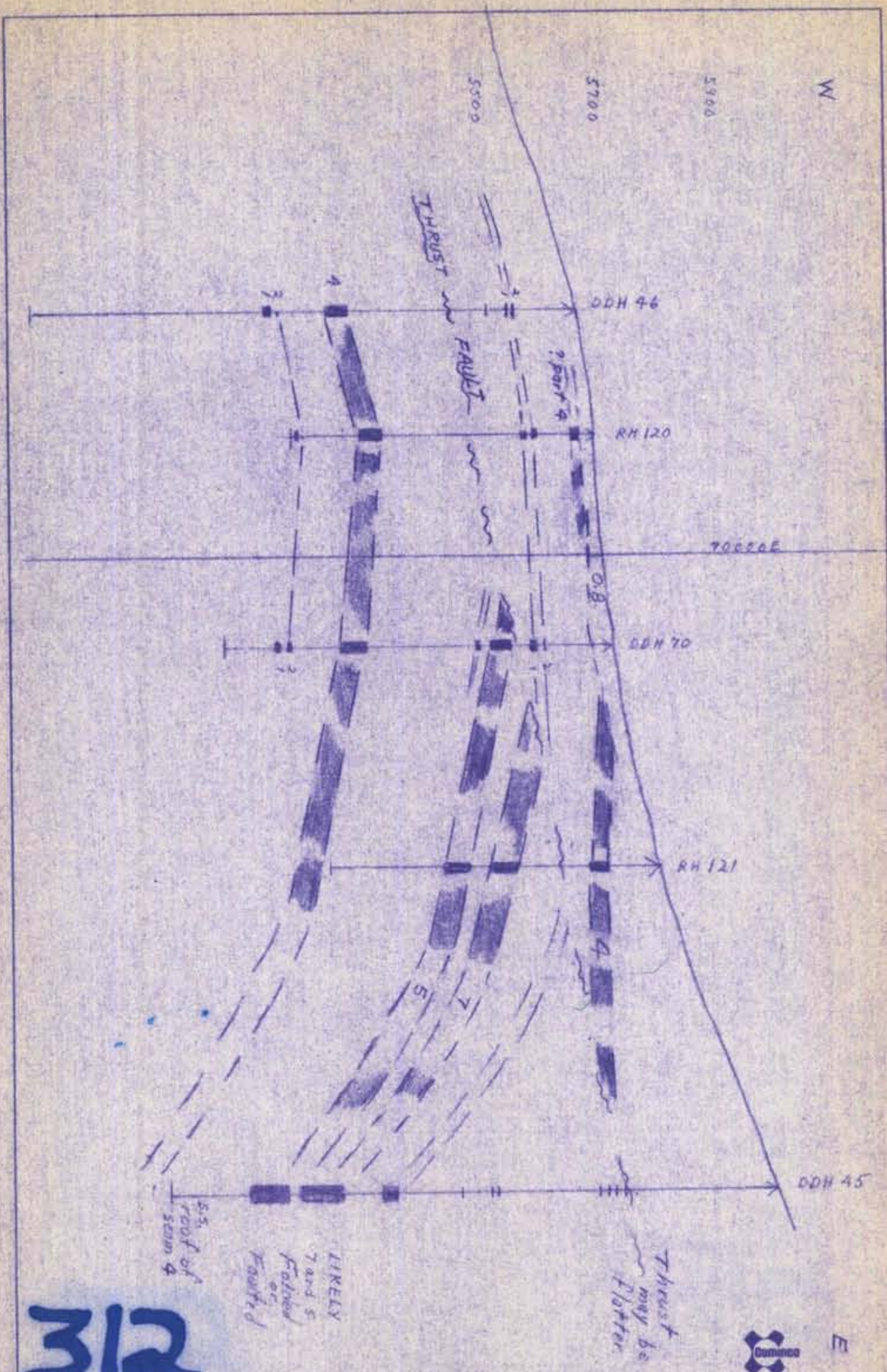
Licences 554 to 560 (inclusive)

This is Exhibit "A" referred to in the affidavit of  
Oscar Irwin Johnson sworn before me the 24<sup>th</sup>  
day of *February*, 1971 at Trail, British Columbia.

  
A Commissioner for taking Affidavits  
for British Columbia

312





312

Drawn by: <i>ALM</i>	Traced by:
Revised by: _____	Revised by: _____
Date: _____	Date: _____

**WEST TURNBULL AREA**  
**section thru holes**  
**46, 120, 70, 121**



FILE NO  
 FR 70(2)A  
*B-D*

Scale: *1 in. = 200 ft.* Date: *Feb. 2, 1971*

Plate: **S-1**

M

5000 5200 5400 5600 5800

76000E

RH 121

RH 128

RH 122

79000E

RH 63 30'S

SECTION F

RH 145 170'S

312

Drawn by: <i>ACM</i>		Traced by:	
Revised by	Date	Revised by	Date

WEST TURNBULL AREA

500,000 N

FILE N°  
FR 70(2)A

Scale:

1"=200'

Date:

FEB 1971

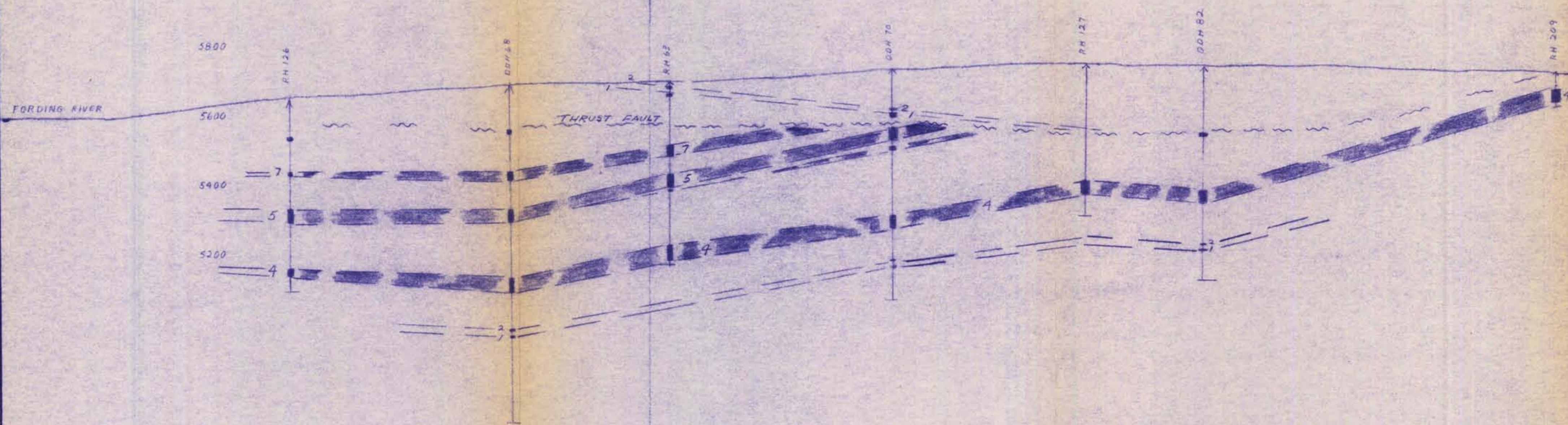
Plate:

S-2

N

S

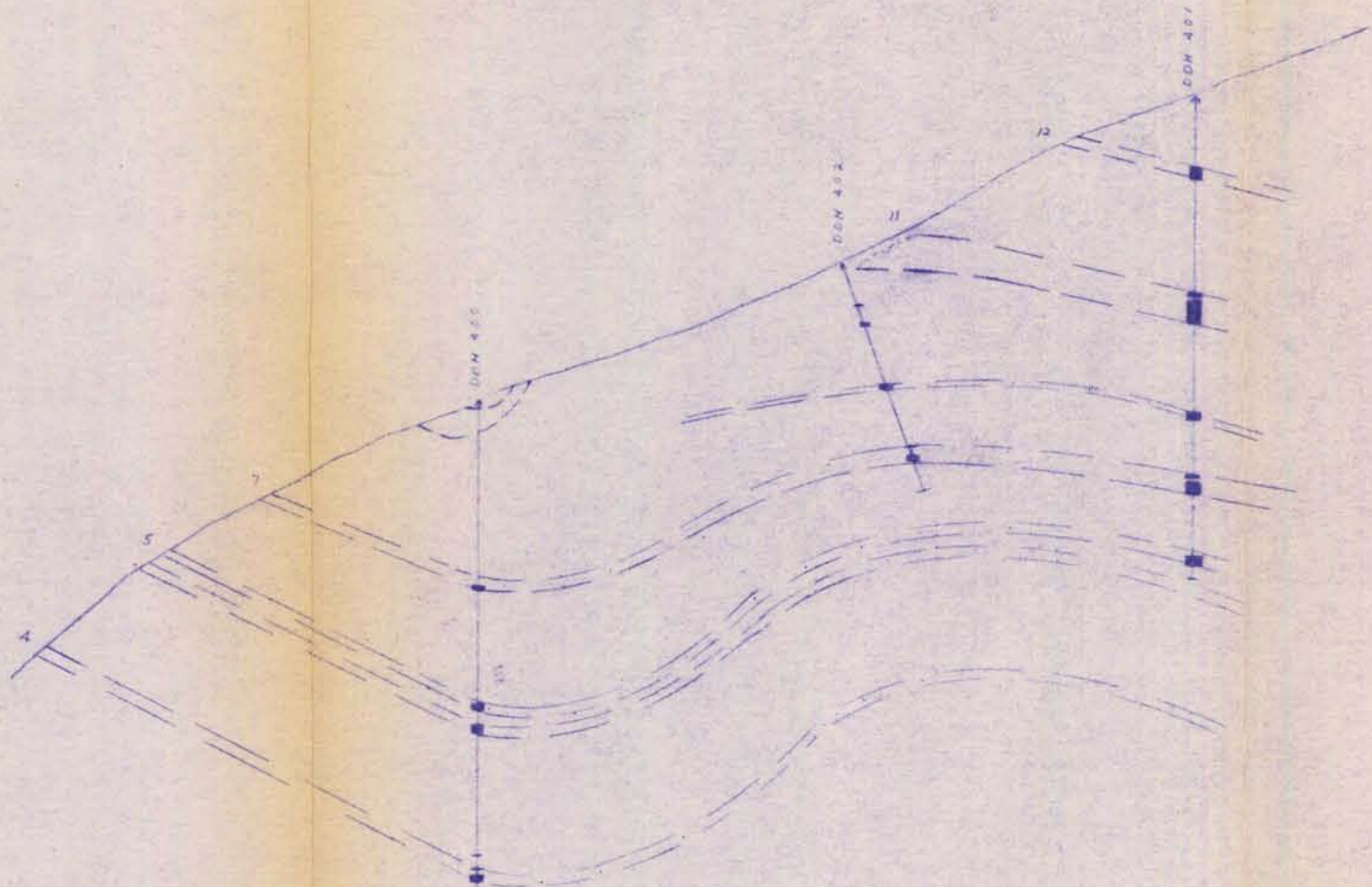
500,000 N



312

Drawn by: <i>TCM</i>		Traced by:		WEST TURNBULL AREA section thru holes 126, 70, 82	FILE # FR 70(12)A S-3
Revised by	Date	Revised by	Date		
				Scale: 1 in. = 200 ft.	Date: Feb. 2, 1971
				Plate: <i>[Signature]</i>	

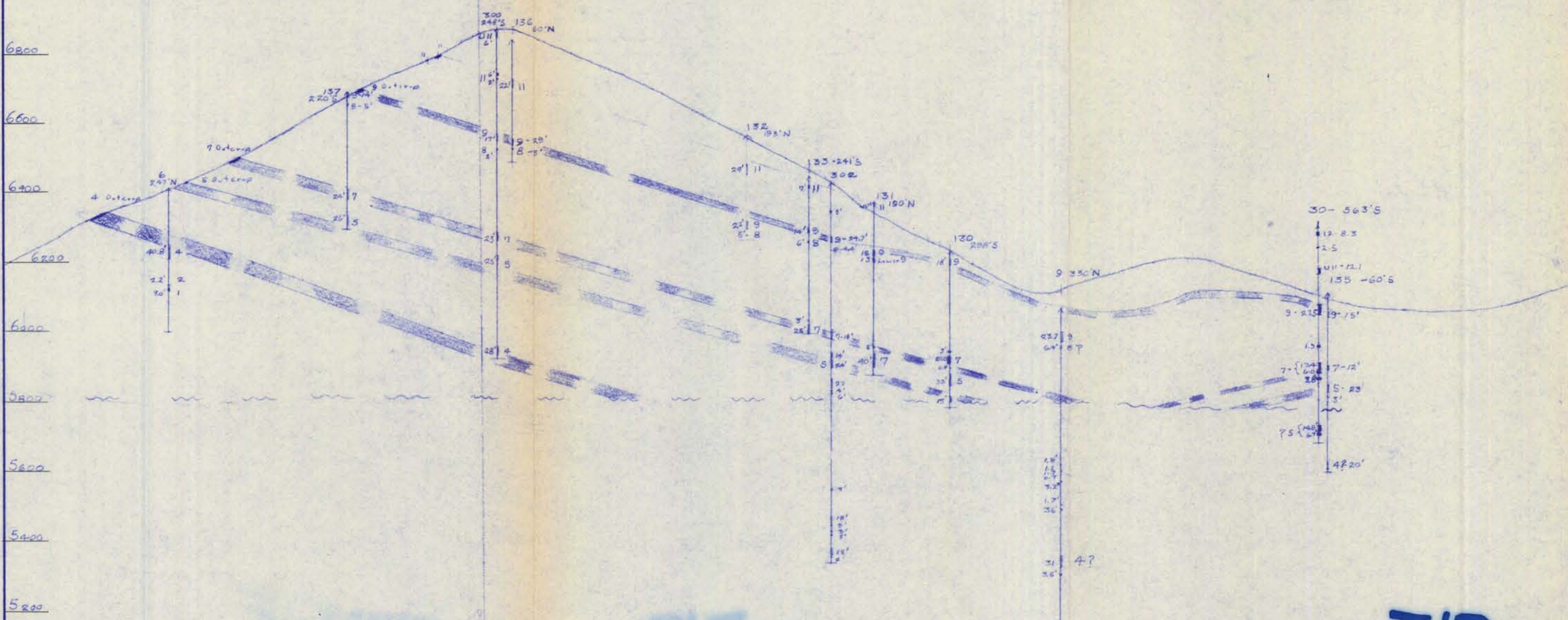
7000  
6800  
6600  
6400  
6200  
6000



312

Drawn by: <i>WEP</i>	Traced by:	Castle Mt.	FILE # FR 70(2)A
Revised by: <i>WEP</i>	Date:		
		Plate: S-4	

7000  
6800  
6600  
6400  
6200  
6000  
5800  
5600  
5400  
5200



312

Drawn by: <i>AM</i>		Traced by:	
Revised by	Date	Revised by	Date
Scale: 1" = 200ft		Date: Jan. 71	Plate: 55

**CLODE CREEK**  
true section thru 302 at N 60 E  
FR 70(2)A

W

E

6600

6400

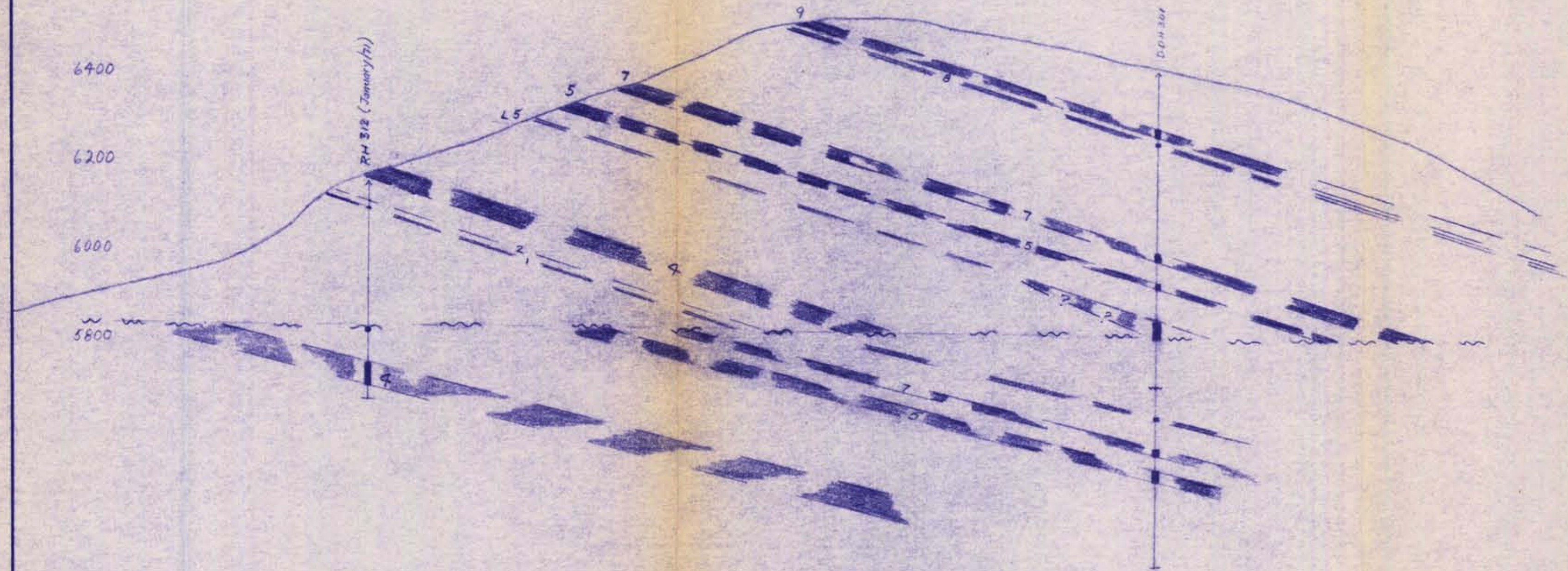
6200

6000

5800

R.H. 312 (January/71)

D.P.H. 301



312

312

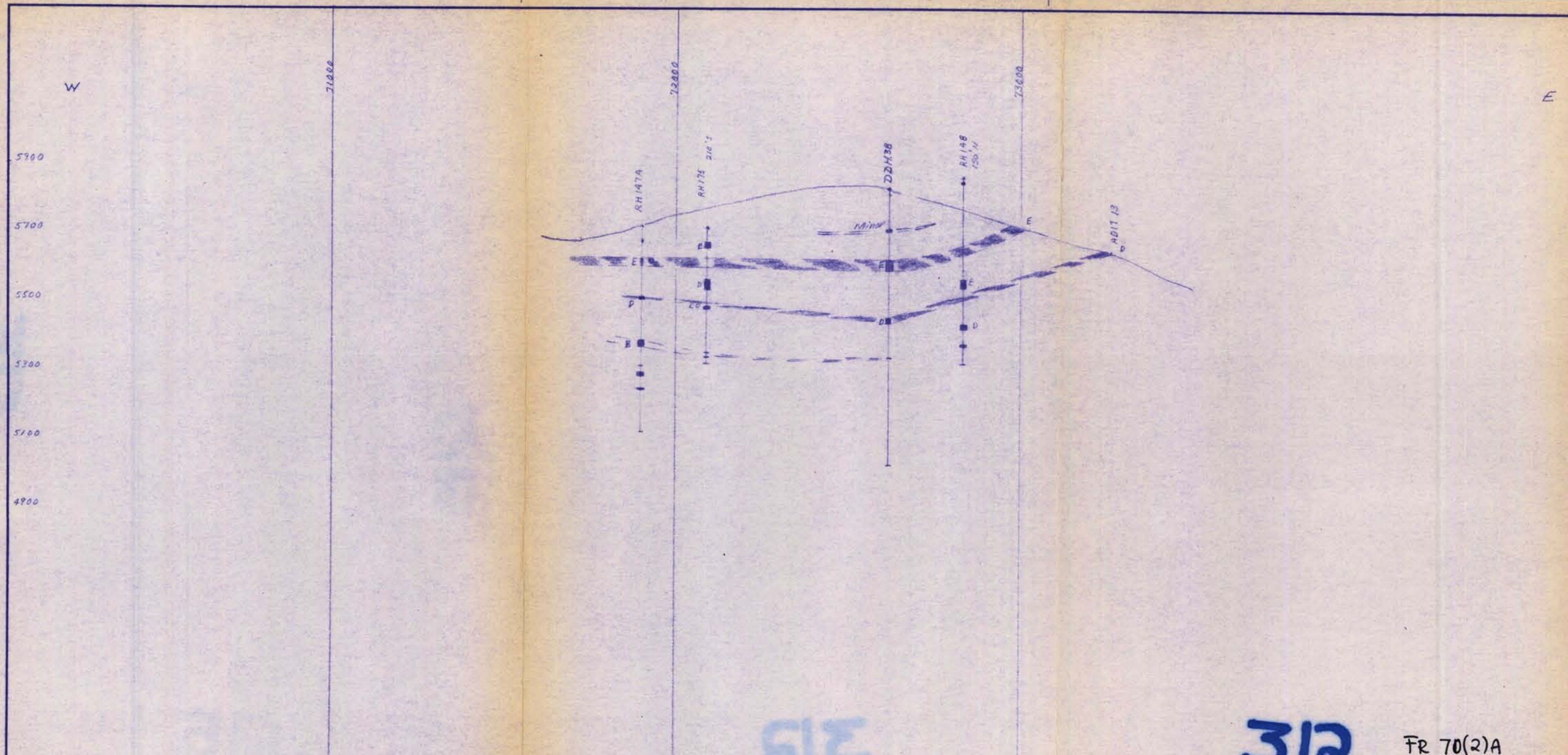


Drawn by: <i>AM</i>		Traced by:	
Revised by	Date	Revised by	Date


**CLODE CREEK**  
 section thru holes  
 312 & 301

F&T(2)A

Scale: *1 in. = 200 ft.* Date: *Feb. 1 1971* Plate: *5-6*



312 FR 70(2)A

Drawn by: <i>WEP</i>		Traced by:		 <b>NORTH GREENHILLS</b> <b>Section EE</b>
Revised by	Date	Revised by	Date	
Scale: 1" = 200'		Date: FEB 1971		Plate: <b>NG-1</b>

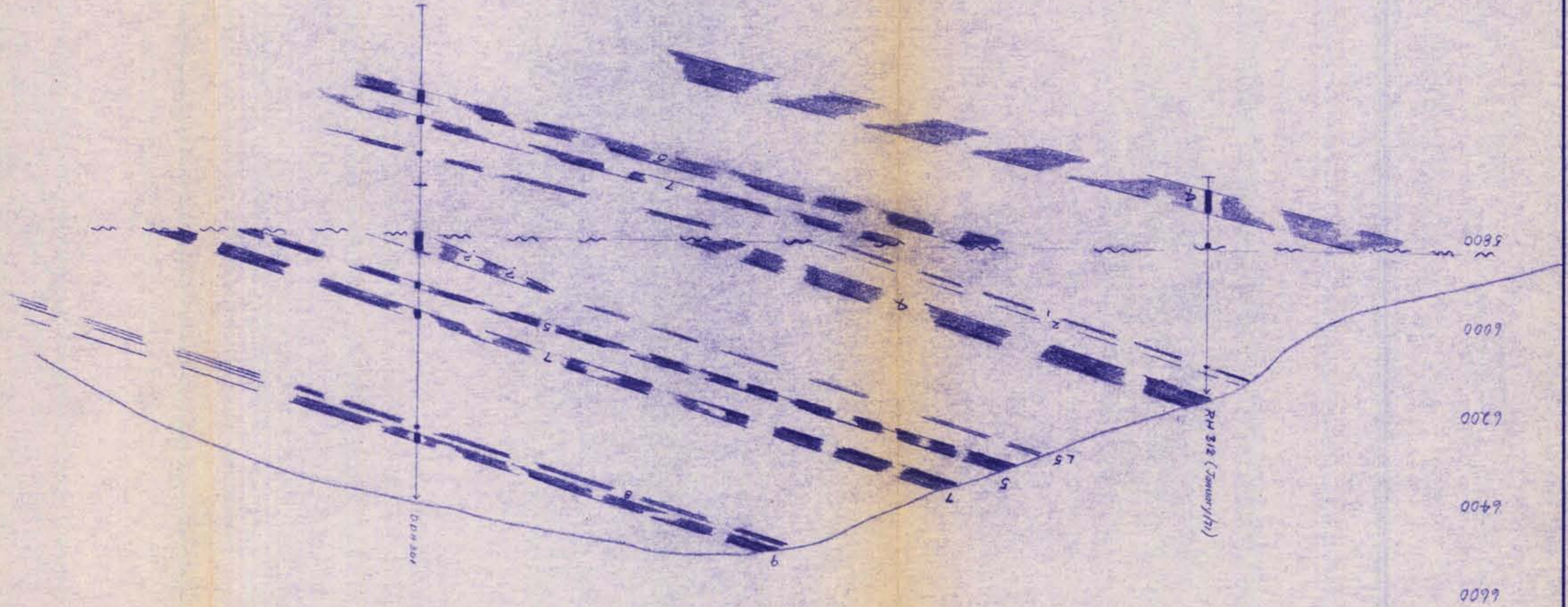
#210-0540

Scale: 1 in. = 200 ft. Date: Feb. 1 1971 Plate: S-6

312 & 301  
section thru holes  
CLODE CREEK

Drawn by: M.M. Traced by: [ ]  
Revised by: [ ] Date: [ ]  
Revised by: [ ] Date: [ ]

3/2



W

E



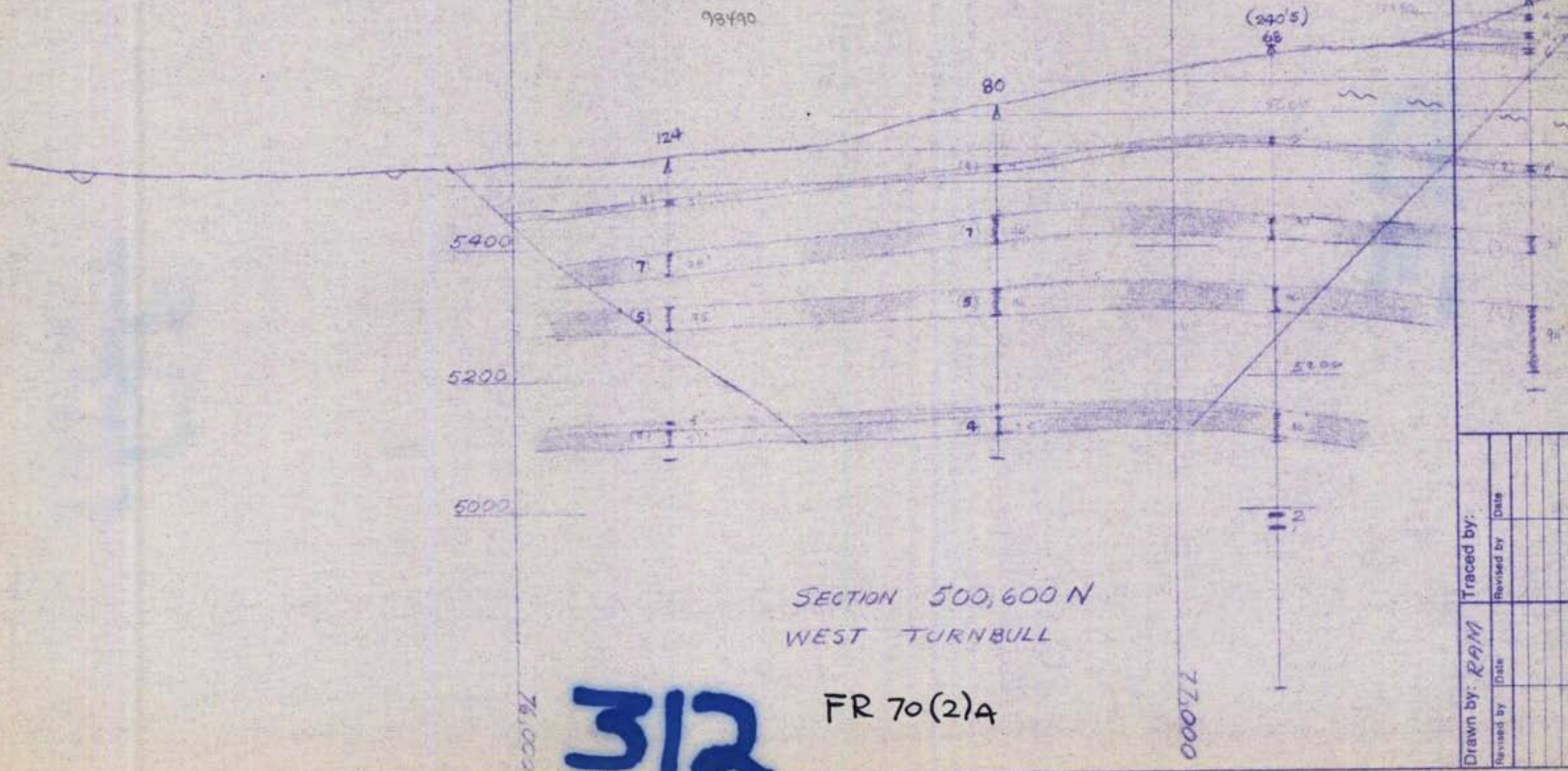
STRIP RATIO  
1:8 1)

W

E



PROB { MEASURED PROB  
52640 (INCLUDE DDH 42)  
45850  
98490



SECTION 500,600 N  
WEST TURNBULL

312

FR 70(2)A

Drawn by: RAM

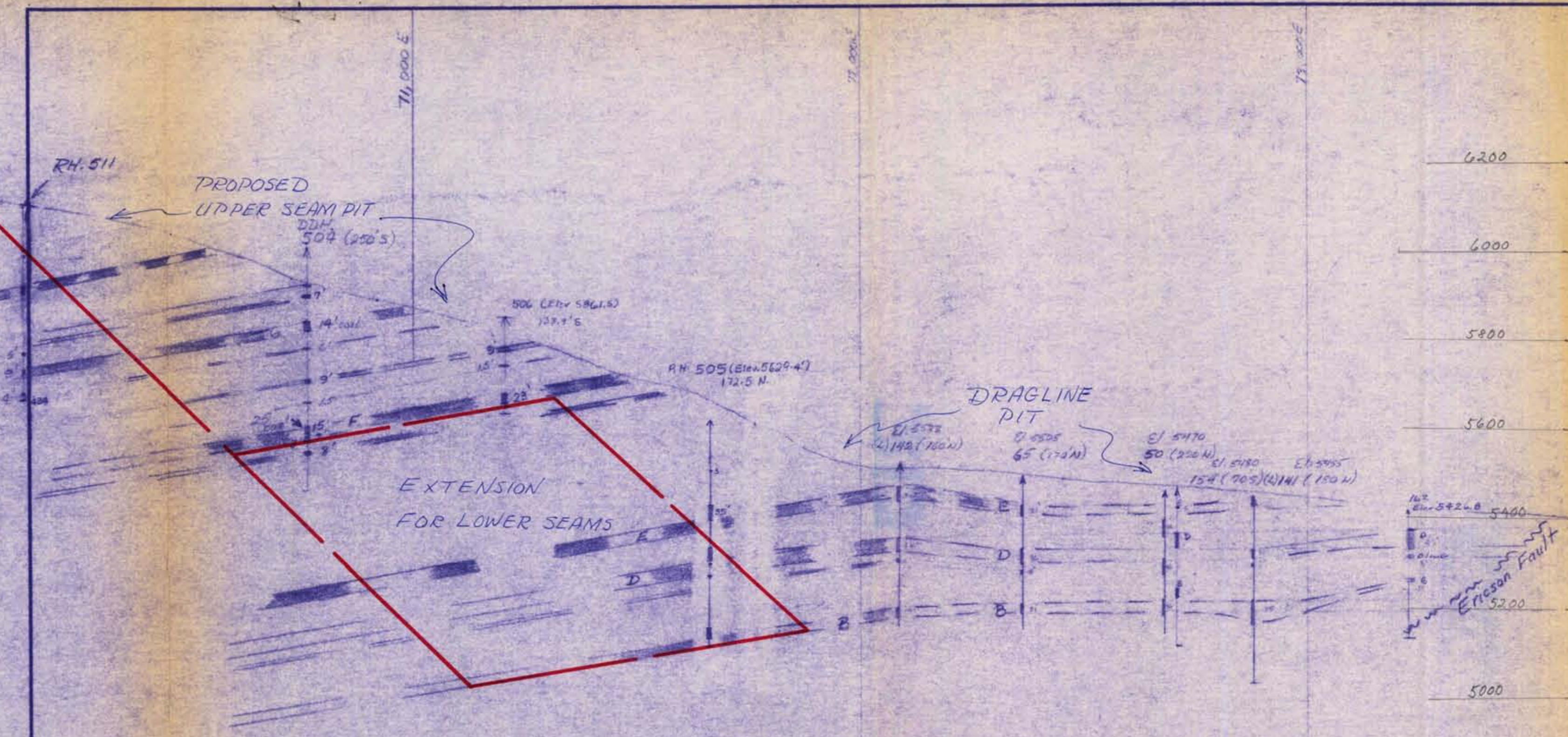
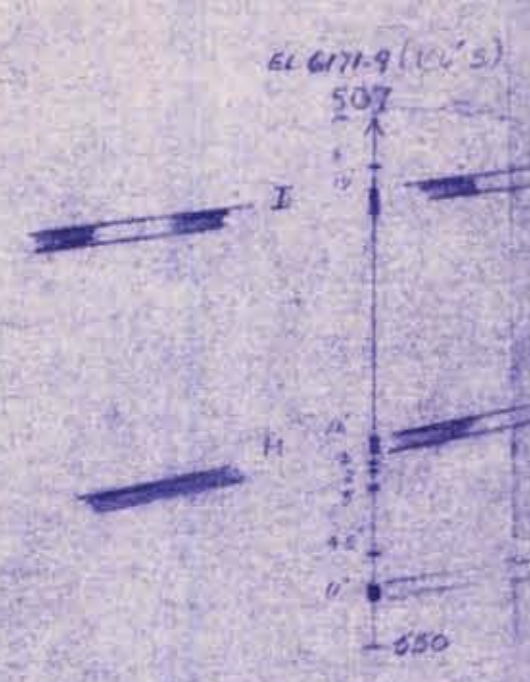
Revised by	Date	Traced by	Revised by	Date

Scale: 1 in. = 200 ft. Date: April 1970

Plate: WT-S-1

210-0810

BCI-2187-C



Traced by:  
 Revised by: Date:  
 Scale: 1" = 200ft Date: Jan. '71 Plate:

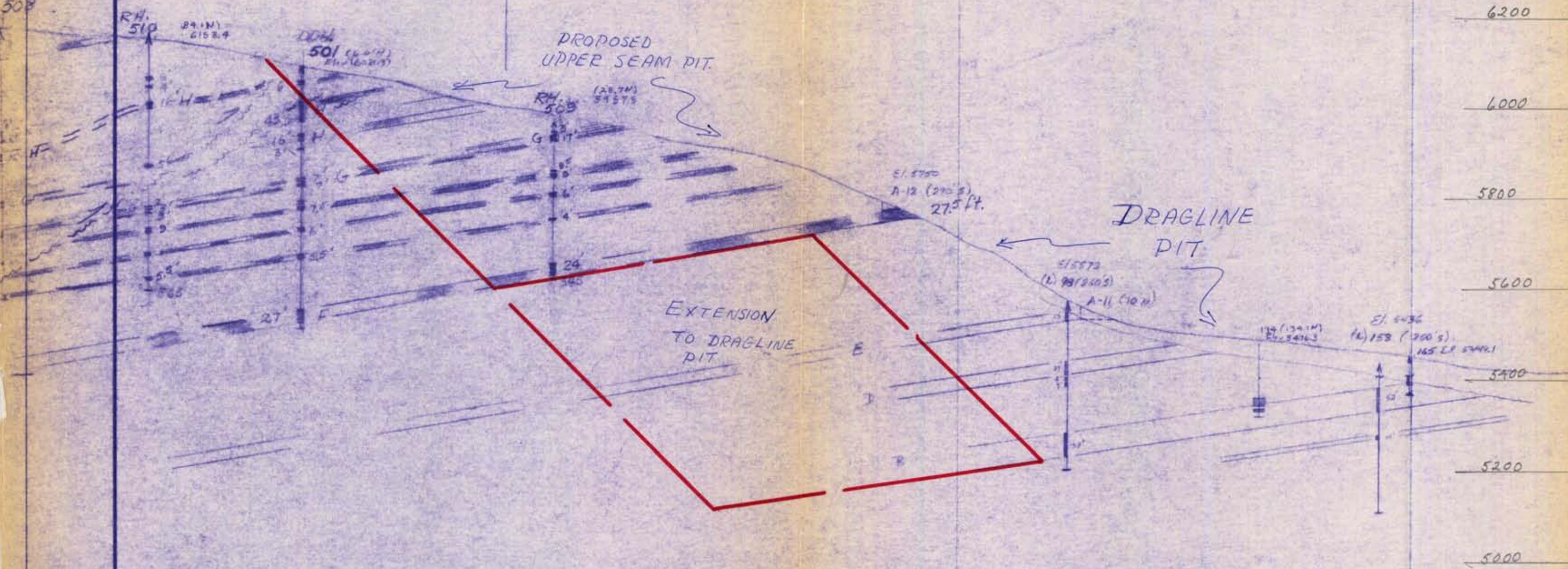
489,000 N

**312**  
 489,000 N  
 GREENHILLS AREA  
 1970

FR 70(2)A

Drawn by: JL	Traced by:
Revised by:	Revised by:
Date:	Date:

R.H. 508



487,500N

1" = 200 ft. Jan. '71

*Franklin Area*  
2-2

312

FR 70(2)A

Drawn by:	
Revised by:	Date:

Proposed  
600'

DH 502

I 15  
2.4  
H 21  
1.5  
G 25  
12'  
F 27

Proposed  
Trench

475'

Trench

DH 21  
1.5  
7.4

15'  
3.0  
10.5  
19'

184

25'  
5'  
20'

EL. 5429.4  
DH ES (123/65)

24' Overburden  
B 45'  
2' cut

6000  
5800  
5600  
5400  
5200  
5000



Date: \_\_\_\_\_ Plate: \_\_\_\_\_

GREEN HILLS  
484,000 N  
1" = 200ft.

FR 70(2)A			
Drawn by: A.T.B.	Traced by: M.M.		
Revised by	Date	Revised by	Date
Scale: 1" = 200'			Date: _____

484.00

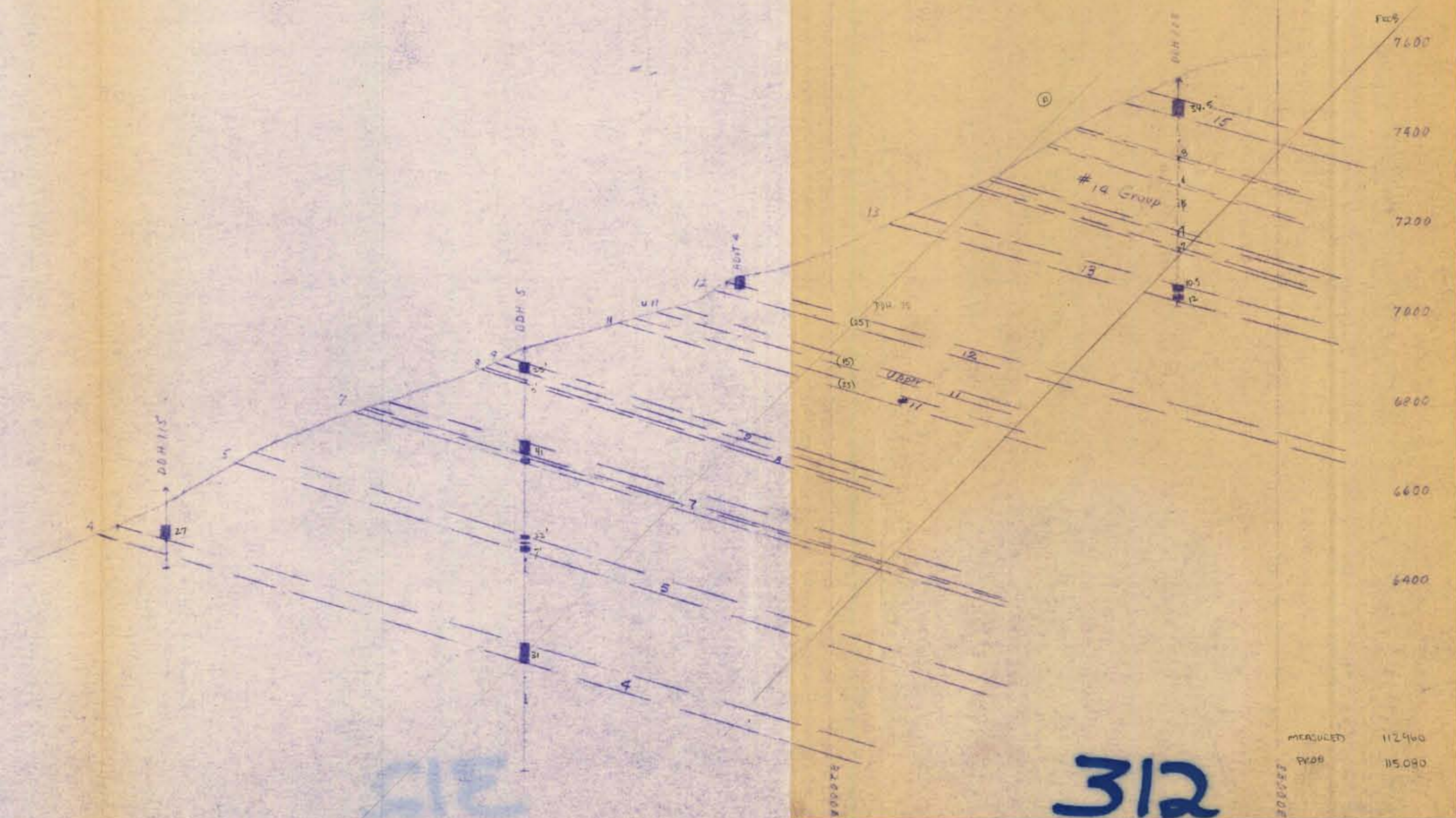
W

E

(A)

MEASURED 112960  
STRIP RATIO 4.6:1

PROB 115080



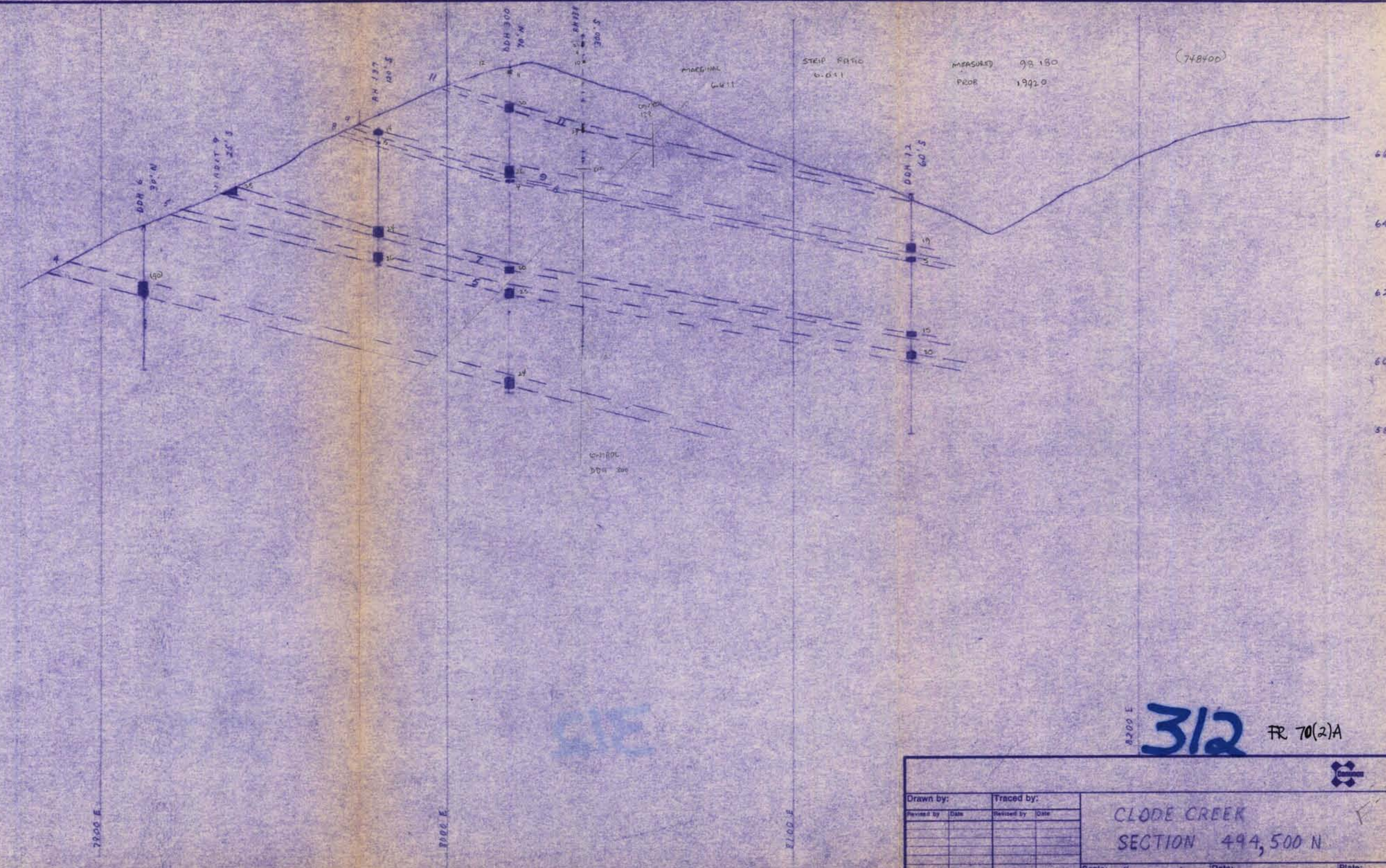
312

MEASURED 112960  
PROB 115080

Drawn by: <i>[Signature]</i>		Traced by: <i>[Signature]</i>		WEST FACE EAGLE MTN. SECTION 48 & 500 N FR 70(2)A	
Revised by:	Date:	Revised by:	Date:		
				Scale: 1" = 100'	Date: JAN 20, 1971
				Plate: E-S-1	

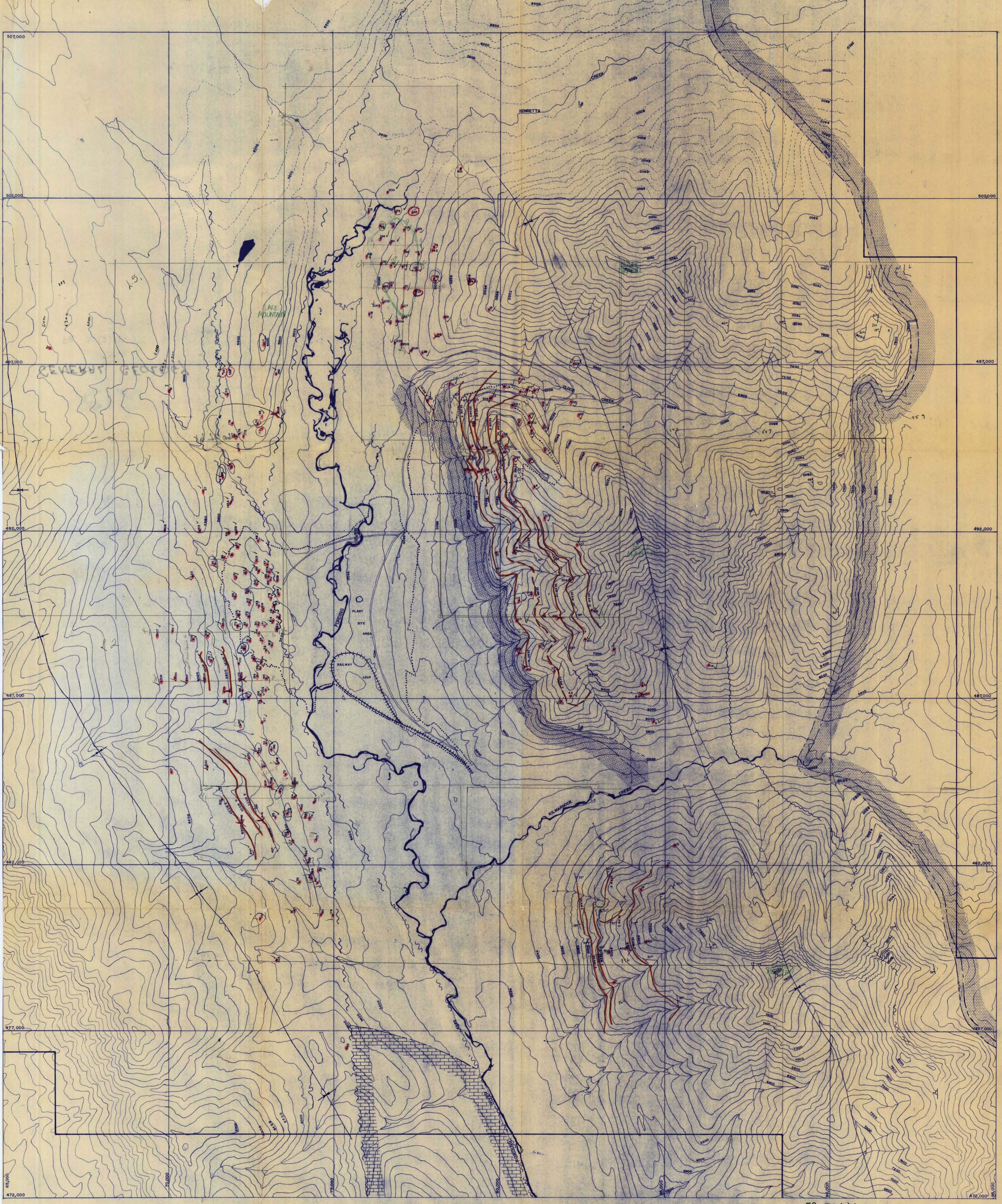
W

E



8200 E  
**312** FR 70(2)A

Drawn by:		Traced by:		 CLUDE CREEK SECTION 494,500 N
Revised by	Date	Revised by	Date	
Scale: 1" = 200'				Date: _____
				Plate: <b>LCI</b>



- LEGEND**
- Adits
  - Drill Holes
  - Railway
  - Main & Haul Roads
  - Cleared Mining & Plant Areas
  - Fording Property Boundary (coal licence)

- Coal Seams
- Synclinal Axis
- Faults - defined, assumed
- Strike & Dip of Bedding

- GEOLOGY-ROCK TYPES**
- Sandstone - Current bedded, Moose mtn, Basal kootenay
  - Shale & Mudstone - Fernie formation
  - Limestone - Rundle formation

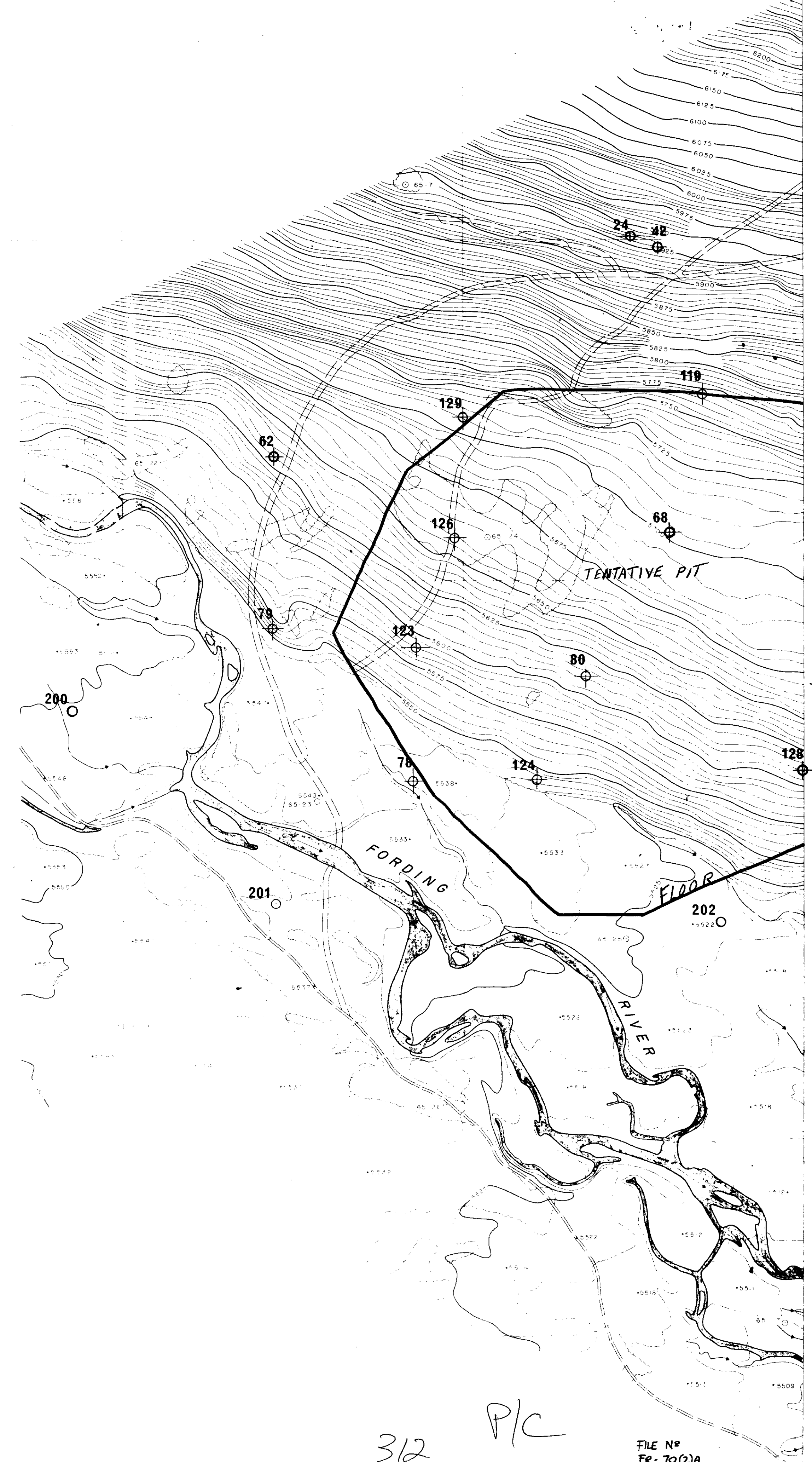


FR 70(2)A

<b>FORDING OPERATIONS</b>			
<b>GENERAL GEOLOGY MAP</b>			
312			
By - RBA	Scale - 1" = 1000'	Date - Jan 22 1971	Plate -

219

601



312 PIC

FILE NO  
FR-70(2)A

Job No J. 813-001	Revision	Topographic compilation by Lockwood Survey Corp. oration from aerial photography flown in 1968.	Reference	Revisions	Drawn by	Function	Scale
FCO	A	Fair drawings by McELHANNEY SURVEYING & ENGINEERING LTD. Job No. 05390-3		No	Checked by Design Eng. Proj. Eng.	FORDING COAL PROJECT COMPLEX ZONING AREAS TOPOGRAPHICAL MAP	1 Inch = 200 Feet
22				Made by	Approved	KEY MAP	Drawing No. FCO A 22
				Date			Revision
				Description			22

Engineering





319

KILMARNOCK

CREEK

13

10

Seam 12

Seam 7

Seam 15

FILE NO FR 70(2)A

Drawing No. J. 813-001

FCO A 12

Revision

Tophographic compilation by McElhanney Surveying & Engineering Ltd from aerial photography flown in 1968.  
Fair drawings by:  
McELHANNEY SURVEYING & ENGINEERING LTD.  
Job No. 05390-3

Issued to

Reference

Revisions

No.	Made by	Date	Description

Drawn by  
Checked by  
Design Eng.  
Proj. Eng.

Approved

Engineering



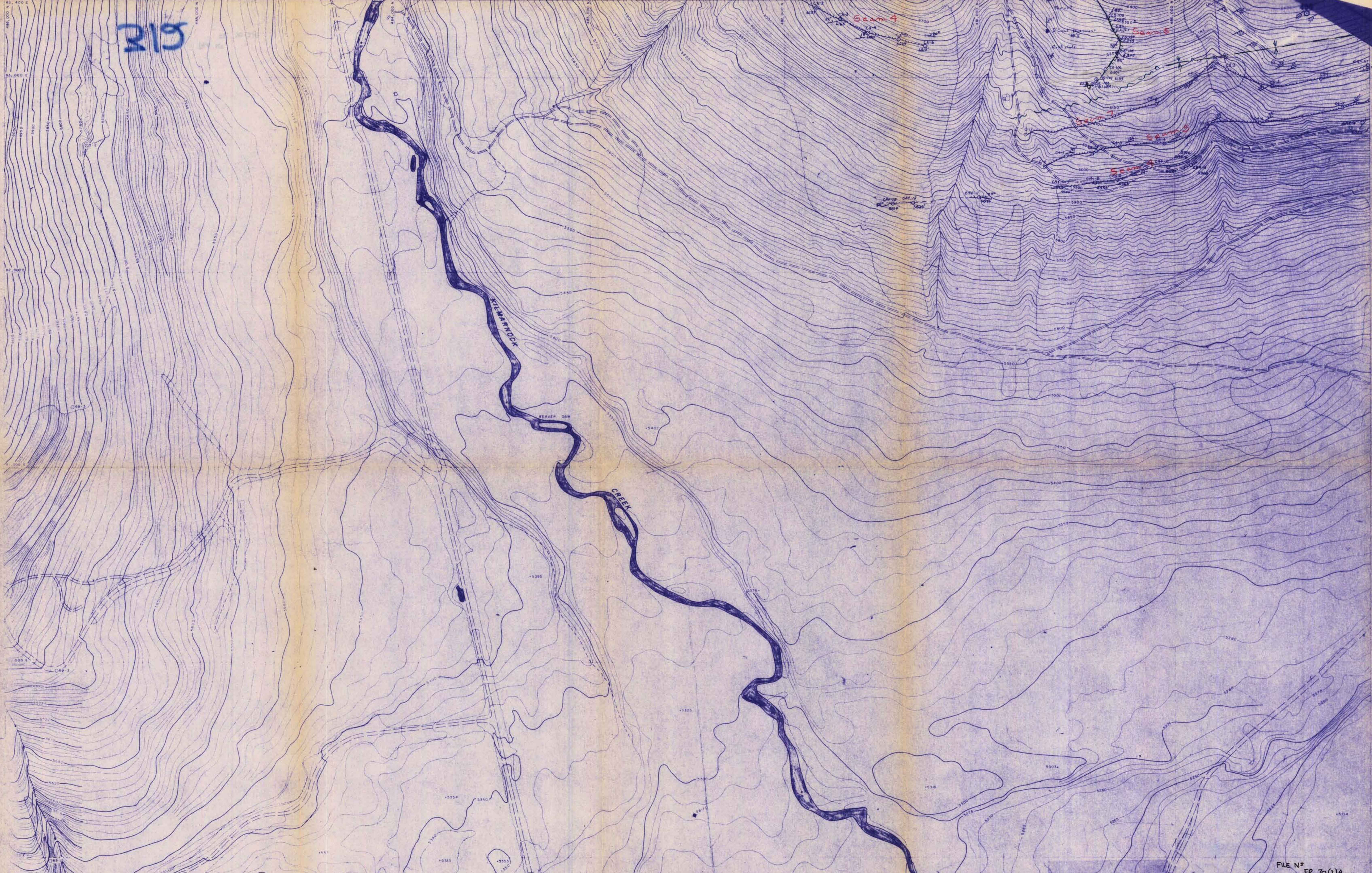
Function Geology  
Activity Seam outcrop survey  
Section MINING AREAS  
Job TOPOGRAPHICAL MAP



Scale 1 Inch = 200 Feet  
Drawing No. FCO A 12

Revision

213



FILE N° FR 70(2)A

No. J. 813-001  
 Drawing No. CO A 11

Reference  
 Topographic compilation by McElhanney Surveying & Engineering Ltd. from aerial photography flown in 1968.  
 Fair drawings by  
 MCELHANEY SURVEYING & ENGINEERING LTD.  
 Job No. 05390-3

Revisions	No.	Made by	Date	Description

Drawn by  
 Checked by  
 Design Eng.  
 Proj. Eng.  
 Approved

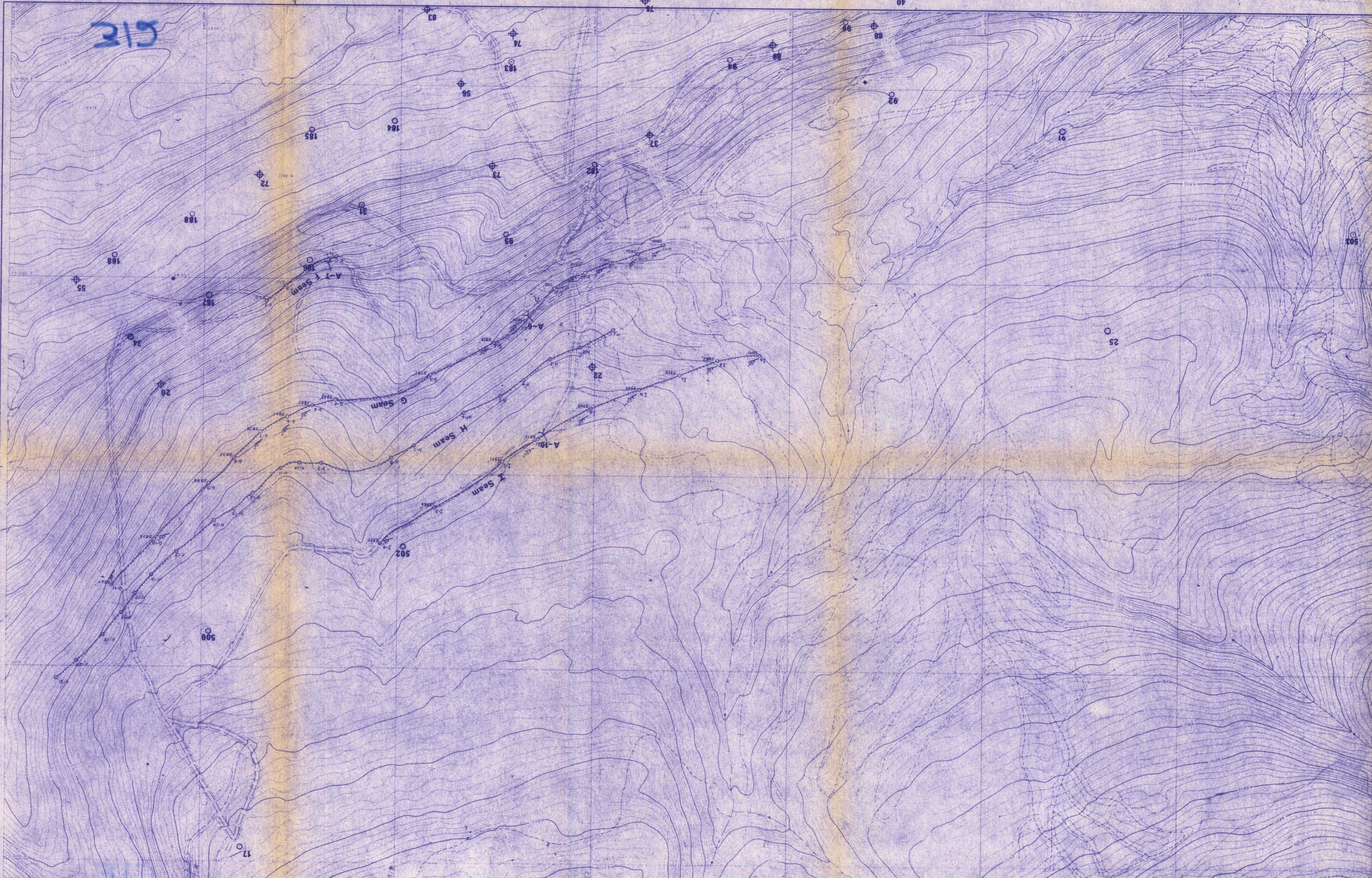
Engineering



Function: Geology  
 Activity: Seam outcrop survey  
 Section: MINING AREAS  
 Job: TOPOGRAPHICAL MAP  
 KEY MAP

Scale: 1 Inch = 200 Feet  
 Drawing No. FCO A 11  
 Revision

319



FILE No FR-70(2)A

Job No. J. 813-001  
 Drawing No. FCO A 9

Topographic compilation by  
 McElhenny Surveying & Engineering Ltd  
 from aerial photography flown on July 28, 1968  
 Job No. 05390-11

Reference

No.	Made by	Date	Description
1	WEL	1/24/68	COMPLETE WEST 1/2 SHEET

Drawn by  
 Checked by  
 Design Eng.  
 Prof. Eng.  
 Approved

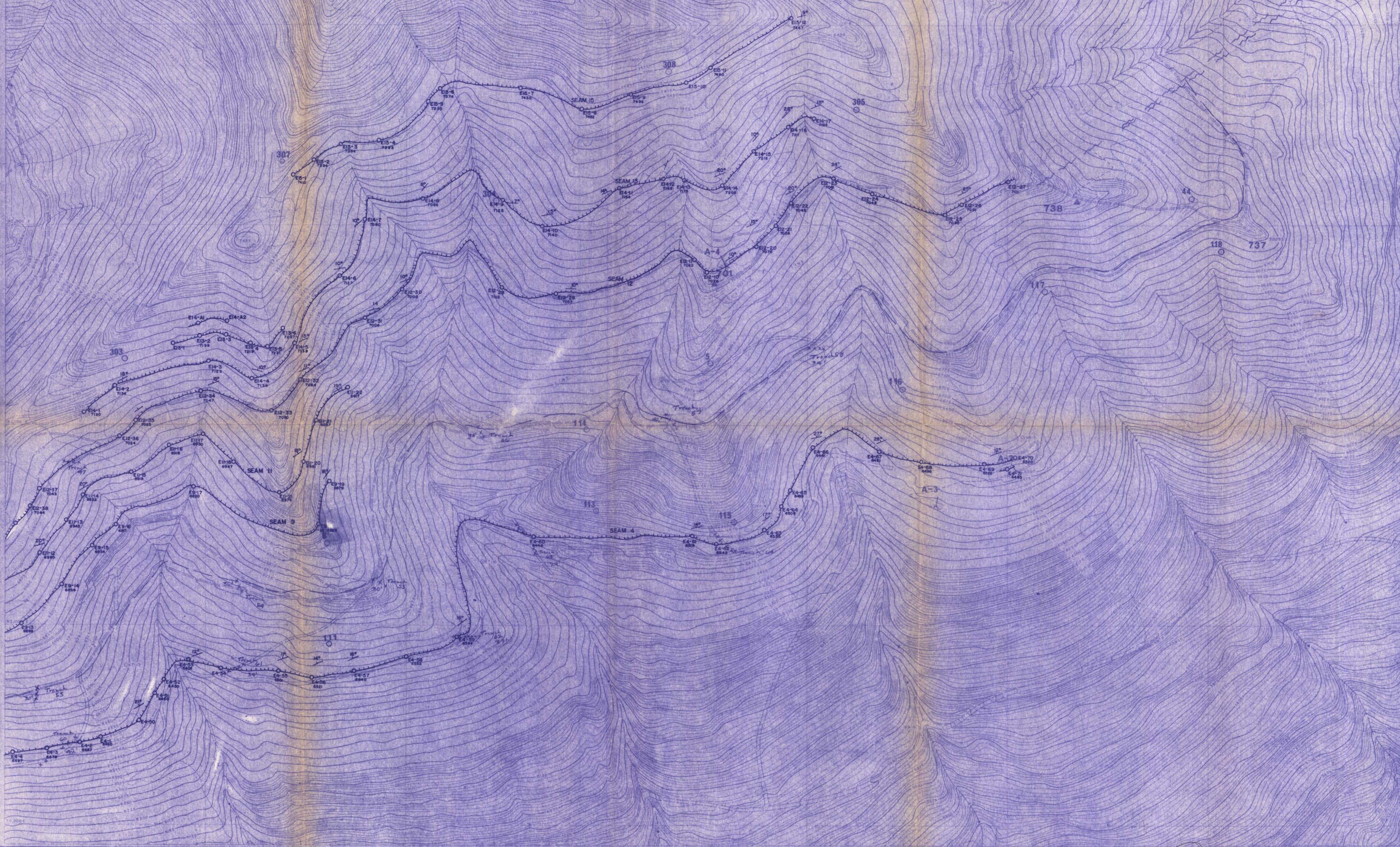
Engineering  


Function FORDING COAL  
 Activity Geology  
 Section Seam outcrop survey  
 Job TOPOGRAPHICAL MAP

Scale 1 inch to 200 Feet  
 Drawing No. FCO A 9  
 Revision 1  
 KEY MAP

312

315



Job No. J.  
 Drawing No. 1000

Topographic compilation by Lockwood Survey Corporation from aerial photography flown in 1958.  
 Fair drawings by  
 MELHANEY SURVEYING & ENGINEERING LTD.  
 Job No. 06390-3

LEGEND  
 Seam B' Seam 4   
 Seam D' Seam 5   
 Seam E' Seam 7

Revisions  
 No. Made by Date Description

Drawn by  
 Checked by  
 Design Eng.  
 Proj. Eng.  
 Approved

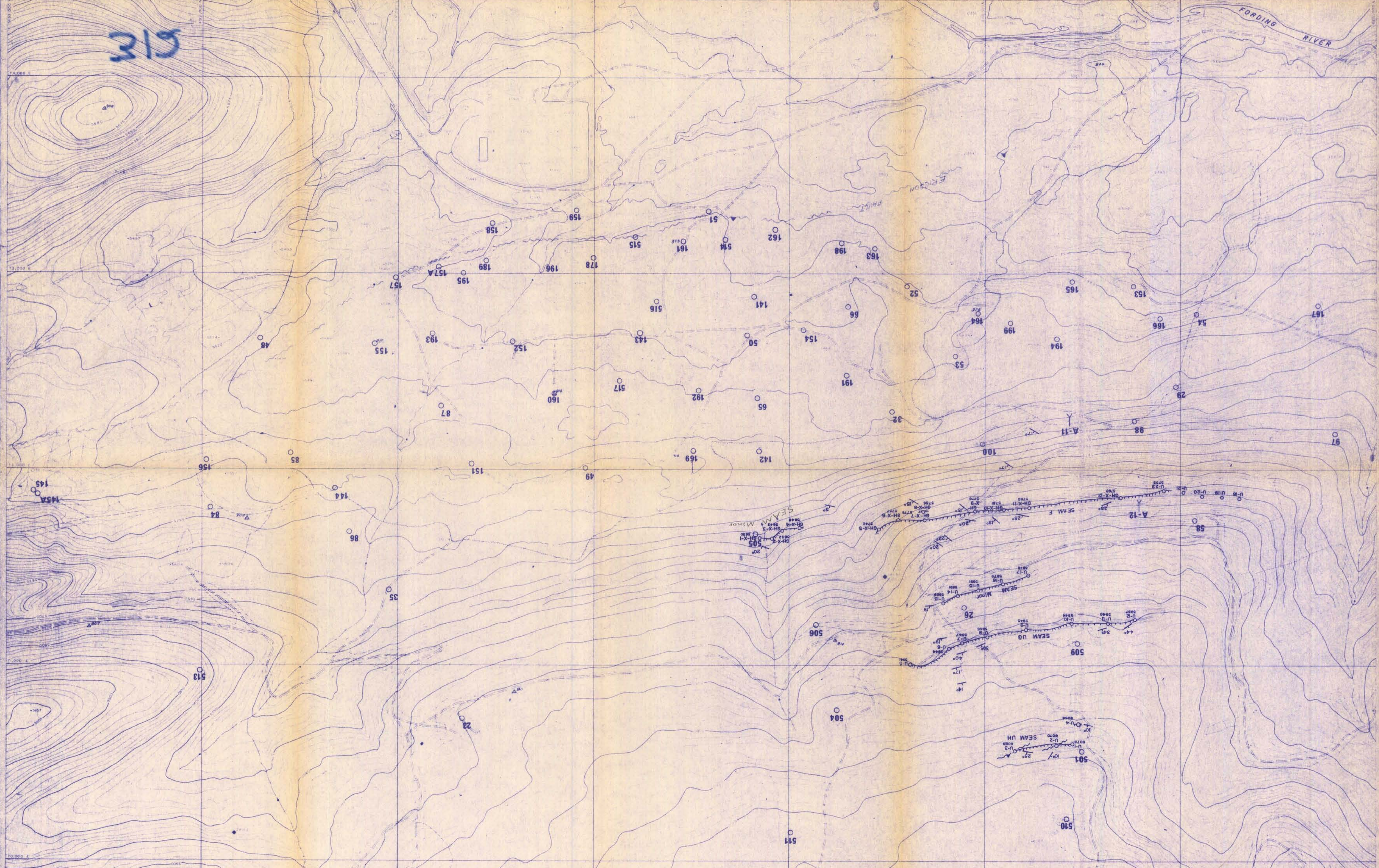
Engineering

Function  
 Activity  
 Section  
 Job  
 Geology  
 Seam Outcrop Survey

Scale 1 inch = 200 Feet  
 FILE NO. FR-70(2)A  
 7  
 KEY MAP

315

FORDING RIVER



FILE NO FR-70(2)A

Job No.	1
Drawing No.	

Revision	
Reference	McELHANNAY SURVEYING & ENGINEERING LTD. Job No. 05390 - 16

Issued to	
Reference	

Revisions	2	20-12-76	CLEARED AREA TO OCT 70
No.	Made by	Date	Description

Drawn by	
Checked by	
Design Eng	
Proj. Eng	
Approved	

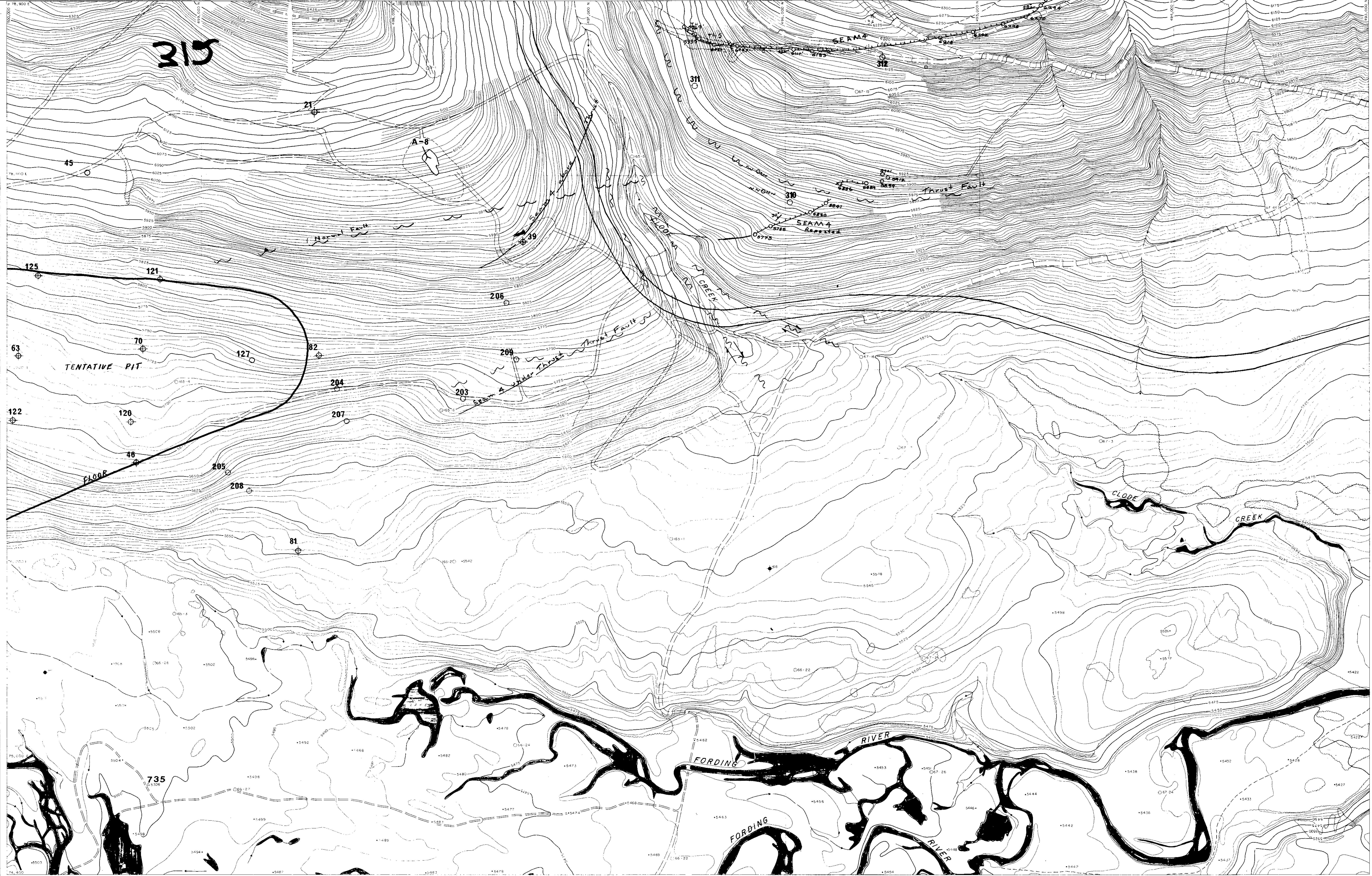
Engineering	
-------------	--



Function	Geology
Activity	Seam Outcrop Survey
Section	
Job	

Scale	1 Inch to 200 Feet
Drawing No.	FCO A 5 2
Revision	





Job No. <b>J.</b>	Topographic compilation by Lockwood Survey Corporation from aerial photography flown in 1968	Seam 'B'	Seam 4	Issued to	Drawn by	Function	Scale
Drawing No.	Revision	Seam 'D'	Seam 5	Revisions	Checked by	Activity	1 inch = 200 Feet
Reference	Fair drawings by: McELHANNAY SURVEYING & ENGINEERING LTD. Job No. 05390-3	Seam 'E'	Seam 7	No.	Design Eng.	Section	KEY MAP
				Made by	Proj. Eng.	Job	FR 70(2)A
				Date	Approved		2
				Description			

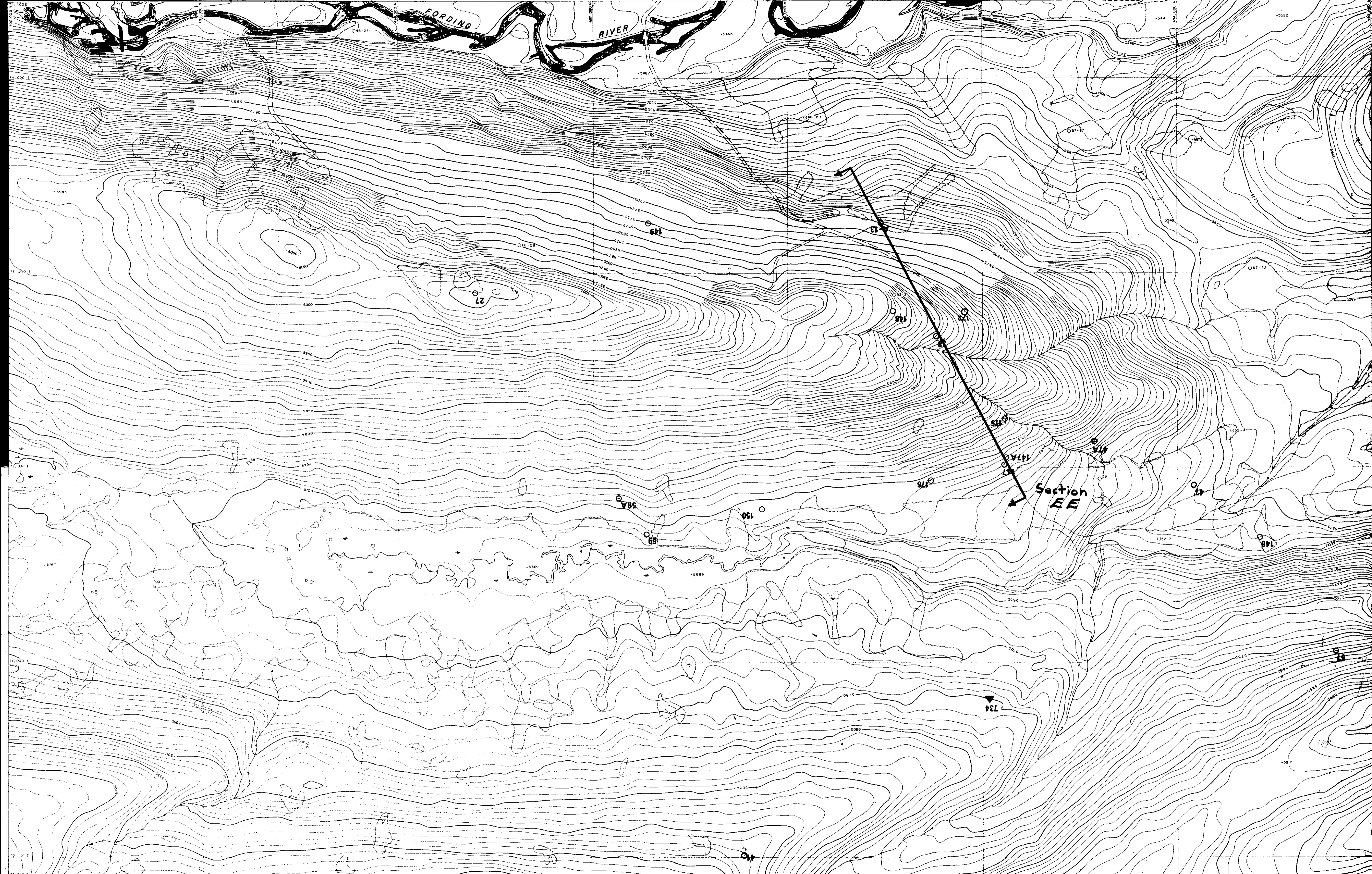


Scale 1 inch = 200 Feet

Revision 2

FILE NO. FR 70(2)A

KEY MAP




Job No. J. 813 001  
 Drawing No. FCO A 1

Topographic compilation by McElhanney Surveying & Engineering Ltd. from aerial photography flown in 1968.  
 Fair drawings by:  
 McELHANNEY SURVEYING & ENGINEERING LTD.  
 Job No. 05390-3

Reference 312

No.	Made by	Date	Description

Drawn by  
 Checked by  
 Design Eng.  
 Proj. Eng. Approved

Engineering   
 FR 70(2)A

Function FORDING COAL  
 Activity PROJECT COMPLEX  
 Section MINING AREAS  
 Job TOPOGRAPHICAL MAP

Scale 1 Inch = 200 Feet  
 Drawing No. FCO A 1  
 KEY MAP



Turnbull Mountain

RH 62. L3. 78. 79

K. F. ...

WELL LOG

ALBERTA

FILE NO. COMPANY **FORDING COAL CO.**

WELL **RH 62**

LOCATION **TURNBULL MOUNTAIN.**

FIELD **FORDING RIVER.**

PROVINCE **BRITISH COLUMBIA.**

Permanent Datum **GROUND LEVEL.** Elev. \_\_\_\_\_

Log Measured from **GROUND LEVEL.** Ft. Above Perm. Datum \_\_\_\_\_

Well Depths Measured from **GROUND LEVEL.** G.L. \_\_\_\_\_

Run No.	<b>ONE</b>
Date	<b>12 MAR 78</b>
First Reading	<b>464</b>
Last Reading	<b>000</b>
Footage Logged	<b>464</b>
Depth Reached	<b>465</b>
Depth Driller	
Casing Driller	
Fluid Type	<b>WATER</b>
Liquid Level	<b>65 FT.</b>
Min. Diam.	
Operating Time	<b>3 HRS.</b>
Truck No.	<b>10</b>

**312**

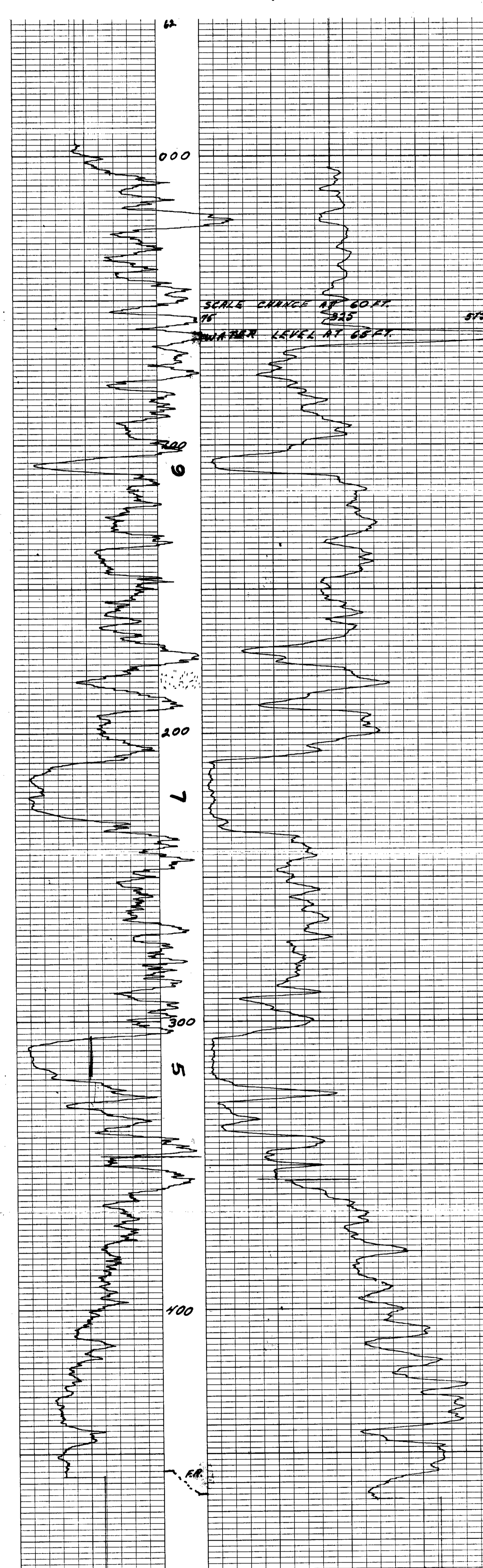
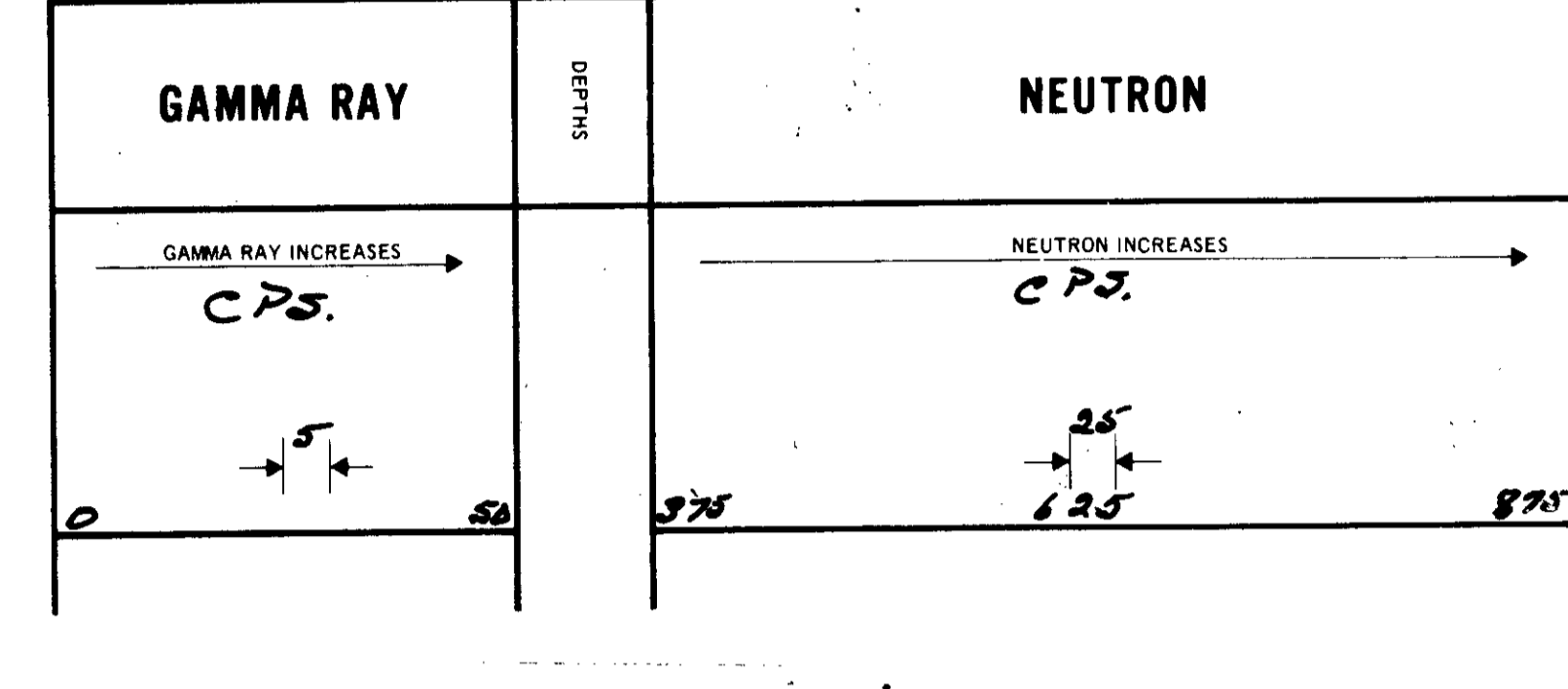
EQUIPMENT DATA

GAMMA RAY				NEUTRON			
RUN NO.	<b>ONE</b>			RUN NO.	<b>ONE</b>		
TOOL MODEL NO.				LOG TYPE	<b>NEUTRON/NEUTRON</b>		
DIAMETER	<b>1 1/2</b>			TOOL MODEL NO.			
DETECTOR MODEL NO.				DIAMETER	<b>1 1/2</b>		
TYPE	<b>GEIGER</b>			DETECTOR MODEL NO.			
LENGTH	<b>18 INCH</b>			TYPE	<b>PROPORTIONAL</b>		
DISTANCE TO N. SOURCE	<b>8.55 FT</b>			LENGTH	<b>6 INCH</b>		
GENERAL				SOURCE MODEL NO.	<b>MRC-N-SS-W</b>		
HOIST TRUCK NO.	<b>10</b>			SERIAL NO.	<b>598</b>		
INSTRUMENT TRUCK NO.				SPACING	<b>19 INCHES</b>		
TOOL SERIAL NO.	<b>CCN2704A65</b>			TYPE	<b>AmBe</b>		
				STRENGTH	<b>6.94 x 10<sup>6</sup> N/S</b>		

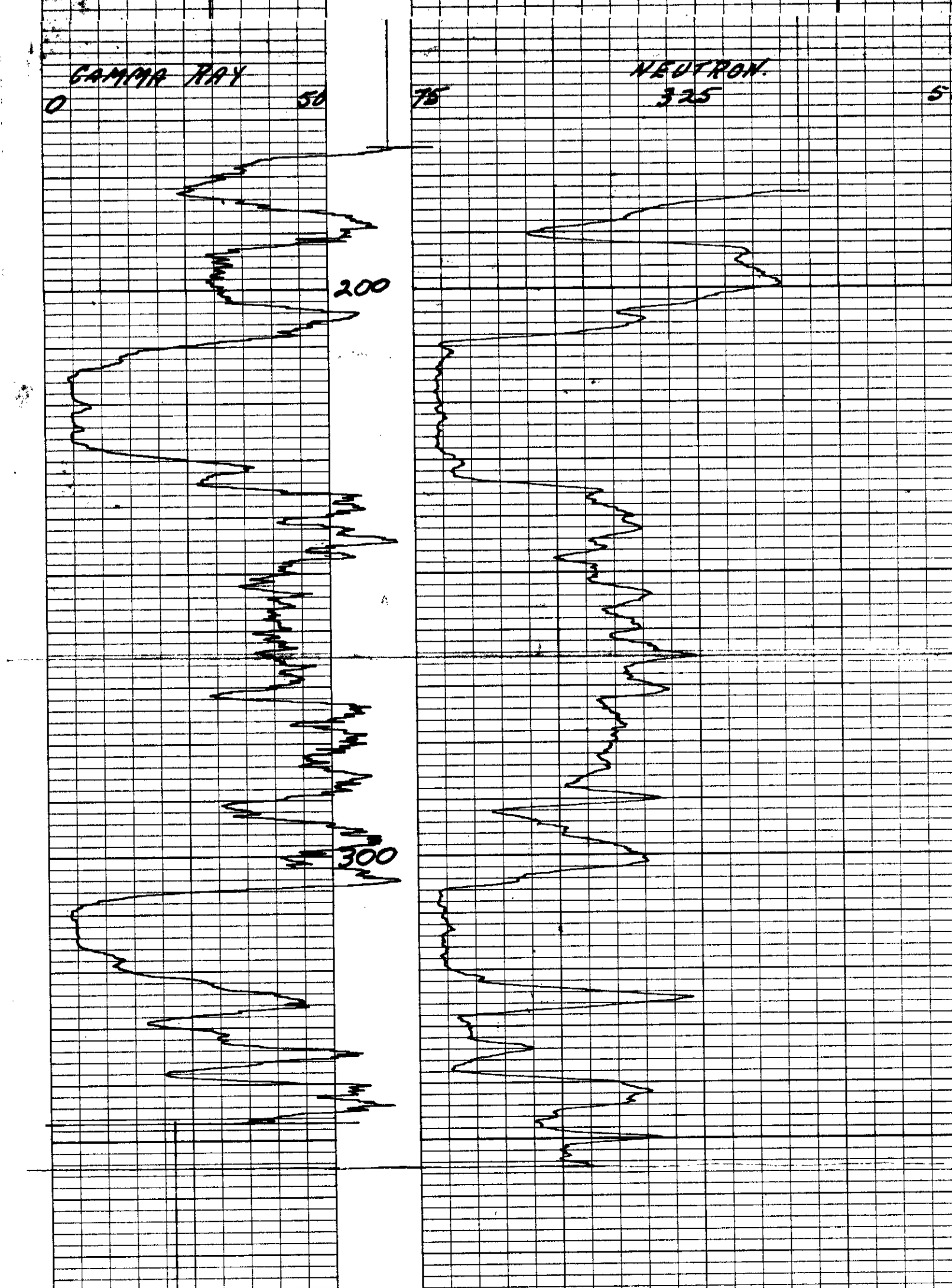
LOGGING DATA

RUN NO.	DEPTHS		SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	GAMMA RAY		T.C. SEC.	SENS SETTINGS	NEUTRON	
	FROM	TO				ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.			ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	000	065	13	4	25	0	5 CPS.	4	5	15 L.	25 CPS.
	065	464	13	4	25	0	5 CPS.	4	5	3 L.	25 CPS.
2	200	350	13	4	25	0	5 CPS.	4	5	3 L.	25 CPS.

REMARKS



REPEAT SECTION



# ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

K-5000-20(3)A-1

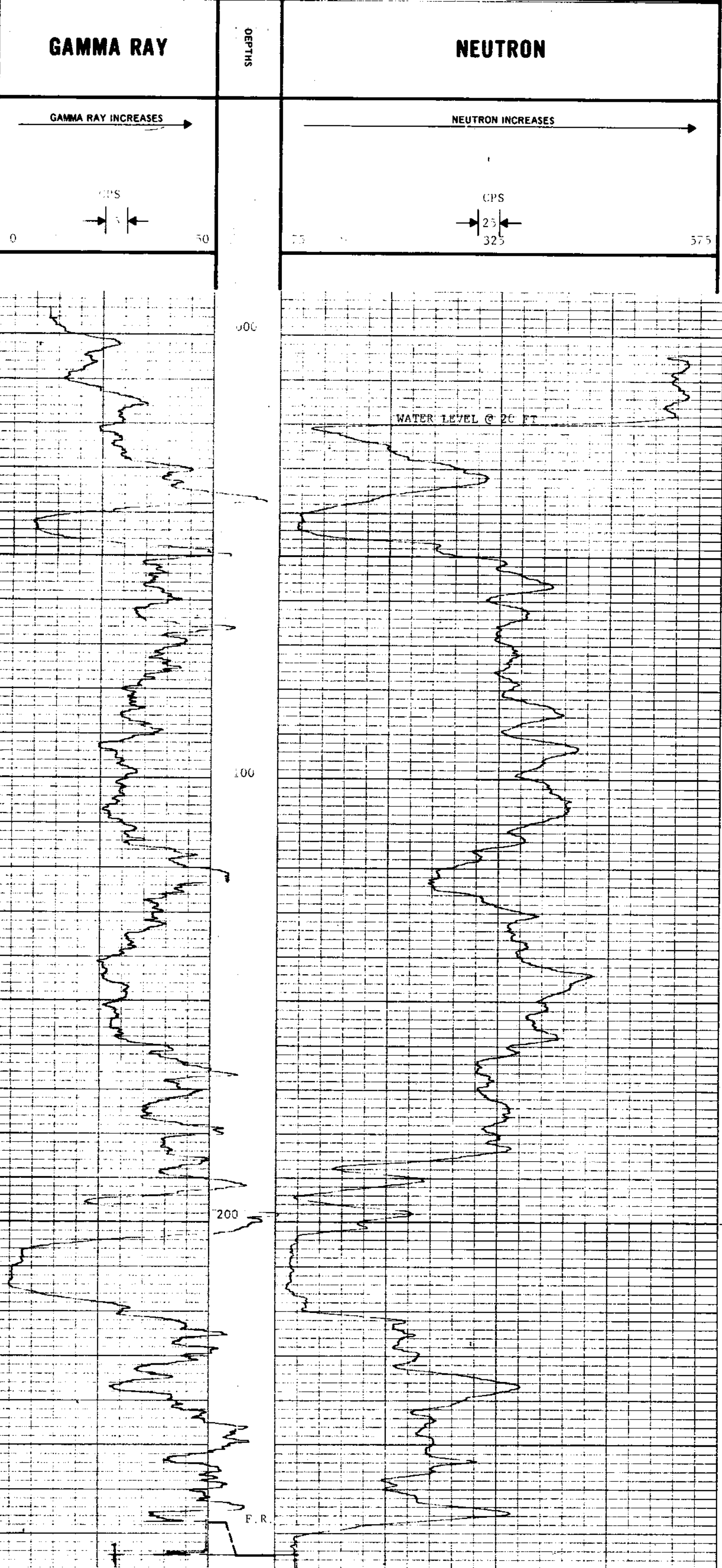
FILE NO.	COMPANY	WELL	LOCATION	PROVINCE
SEC	PERMIAN COND. CO. LTD.	98-03	THORNHILL MOUNTAIN	BRITISH COLUMBIA
TWP			FORDING RIVER	
RGE				
W				
M				
Permanent Datum	GROUND LEVEL	Elev.	K.B.	
Log Measured from	GROUND LEVEL	Ft. Above Perm. Datum	D.F.	
Well Depths Measured from	GROUND LEVEL		G.L.	
Run No.	DATE	First Reading	Last Reading	Footage Logged
001	7-7-66	272	0	272
Depth Reached	276			
Depth Driller	234			
Casing Role				
Casing Driller				
Fluid Type	WATER			
Liquid Level	20			
Min. Datum				
Operating Time	2 HOURS			
Truck No.	10			
Recorded By	JAMNS	Witnessed By	PEARSON	

**312**

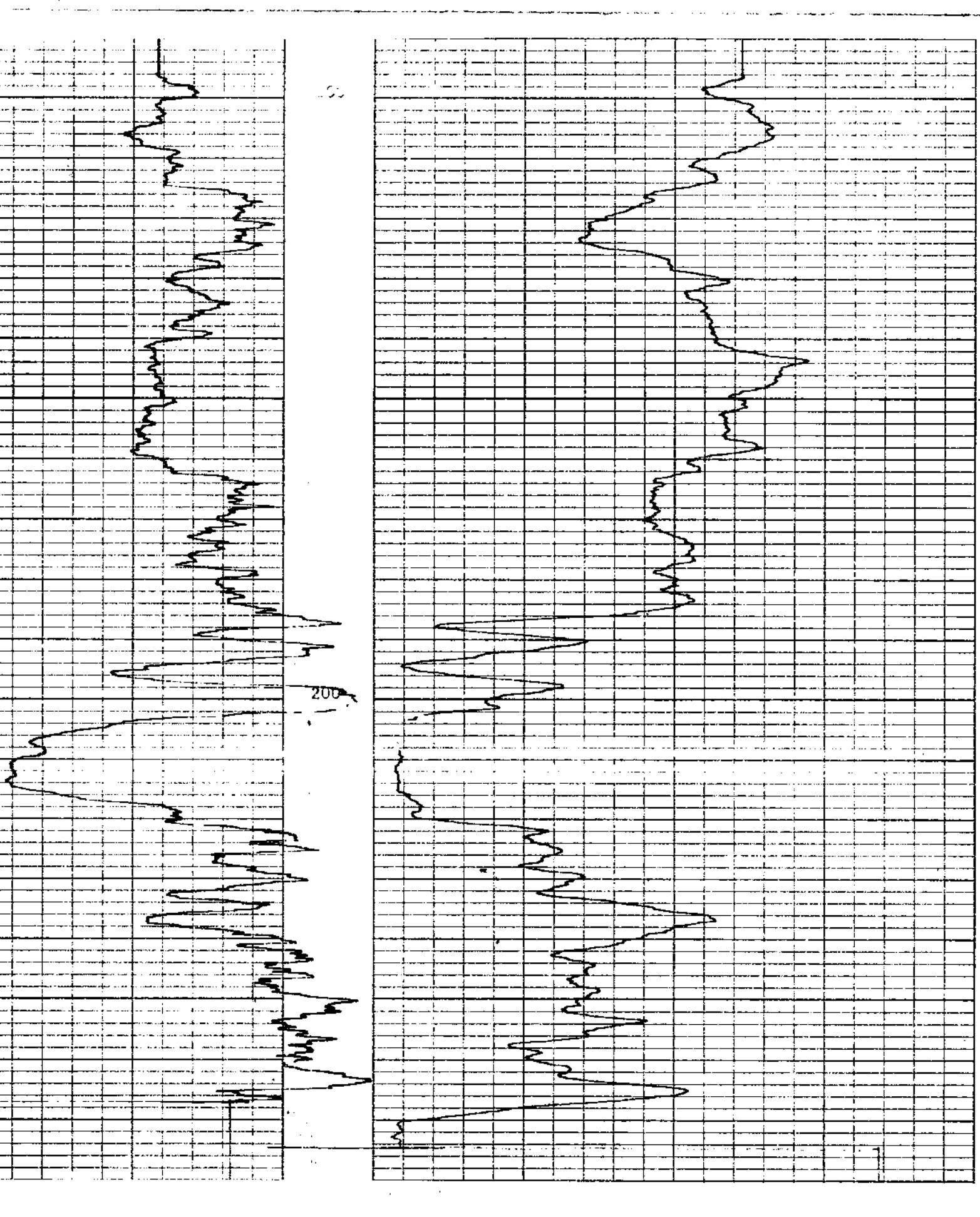
EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.	1H	LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/2	TOOL MODEL NO.	1H
DETECTOR MODEL NO.		DIAMETER	6 INCH
TYPE	GEIGER	DETECTOR MODEL NO.	
LENGTH	18 INCH	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	8.55 FT	LENGTH	6 INCH
		SOURCE MODEL NO.	MRC-N-SS-W
		SERIAL NO.	598
HOIST TRUCK NO.	10	SPACING	19 INCH
INSTRUMENT TRUCK NO.		TYPE	AmBe
TOOL SERIAL NO.	CGN27U465	STRENGTH	6.94 x 10 <sup>6</sup> N/S

LOGGING DATA										
GENERAL			GAMMA RAY				NEUTRON			
RUN NO.	DEPTHS	SPEED FT/MIN	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	000 TO 275	13	4	25	0	5 cps	4	5	3L	25 cps
	100	275	REPEAT SECTION - SCALE AS ABOVE							

REMARKS



REPEAT SECTION



K-5-585014 26(5)9

# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO. COMPANY **FORDING COAL CO LTD**

WELL **PH 63.**

LOCATION **TORNHILL MOUNTAIN.**

FIELD **FORDING RIVER.**

PROVINCE **BRITISH COLUMBIA.**

Permanent Datum Log Measured from **CHORD LEVEL.** Elev. \_\_\_\_\_ K.B. \_\_\_\_\_  
 Well Depth Measured from **CHORD LEVEL.** Ft. Above Perm. Datum D.F. \_\_\_\_\_ G.L. \_\_\_\_\_

Run No. **ONE**

Date **25 MAR 52**

First Reading **275**

Last Reading **000**

Footage Logged **275**

Depth Reached **276**

Depth Driller **534**

Casing Role \_\_\_\_\_

Casing Driller \_\_\_\_\_

Fluid Type **WATER**

Liquid Level **20 FT.**

Mfn. Diam. \_\_\_\_\_

Operating Time **2 HRS.**

Truck No. **10**

Recorded By **BANKS.**

Witnessed By **PETERSON**

**312**

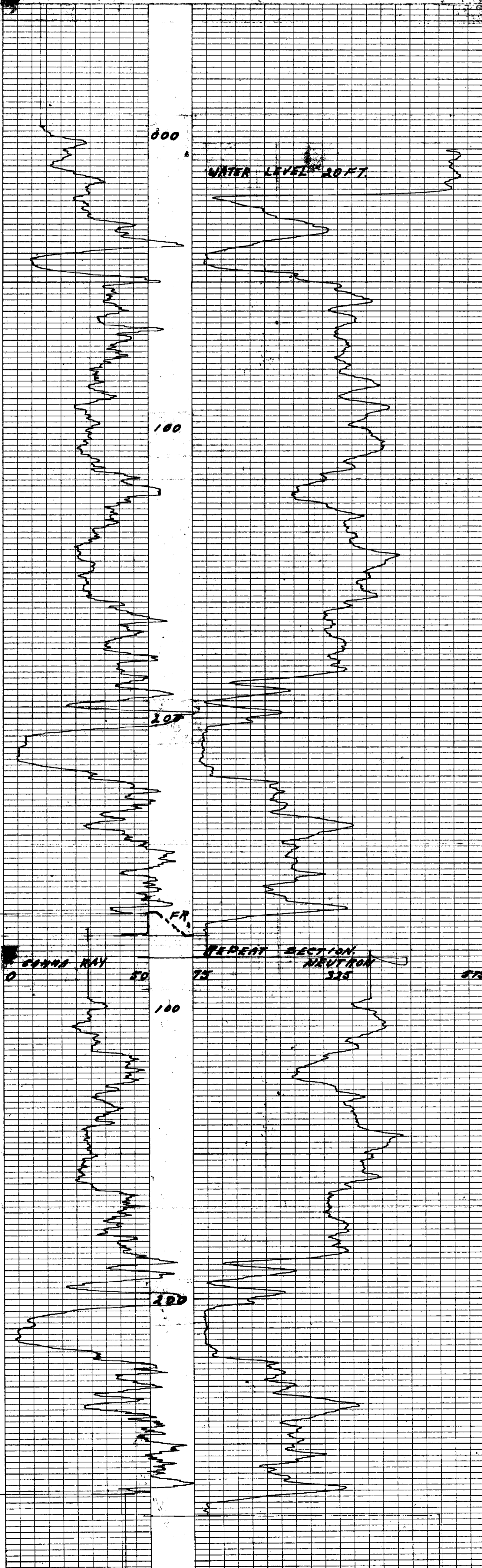
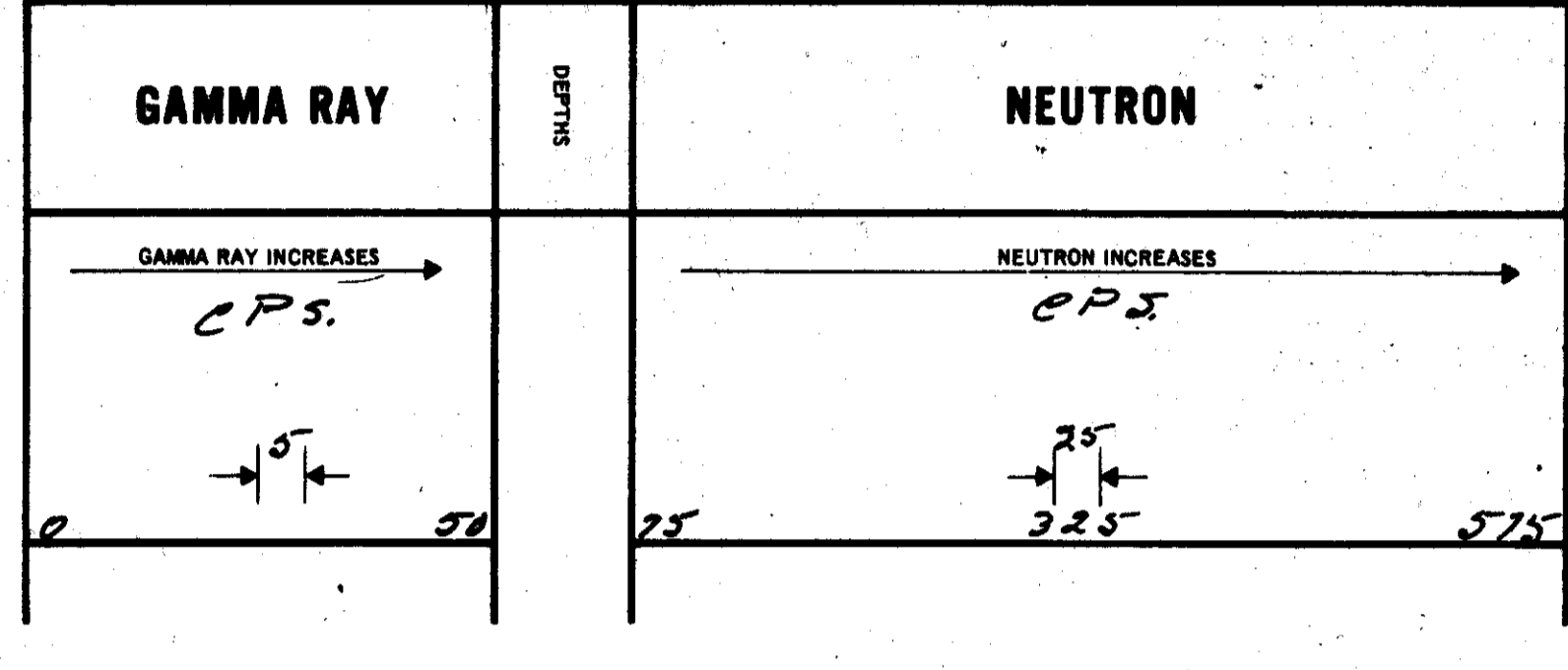
### EQUIPMENT DATA:

GAMMA RAY		NEUTRON	
RUN NO.	<b>ONE</b>	RUN NO.	<b>ONE</b>
TOOL MODEL NO.		LOG TYPE	<b>NEUTRON/NEUTRON</b>
DIAMETER	<b>1 1/2</b>	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	<b>1 1/2</b>
TYPE	<b>GEIGER</b>	DETECTOR MODEL NO.	
LENGTH	<b>18 INCH</b>	TYPE	<b>PROPORTIONAL</b>
DISTANCE TO SOURCE	<b>8.35 FT</b>	LENGTH	<b>6 INCH</b>
		SOURCE MODEL NO.	<b>MRC-N-SS-W</b>
		SERIAL NO.	<b>598</b>
HOIST TRUCK NO.	<b>10</b>	SPACING	<b>19 INCHES</b>
INSTRUMENT TRUCK NO.		TYPE	<b>AmBe</b>
TOOL SERIAL NO.	<b>C6N274412</b>	STRENGTH	<b>6.94 x 10<sup>6</sup> N/S</b>

### LOGGING DATA:

RUN NO.	DEPTHS		SPEED FT/MIN	T.C. SEC.	SENS. SETTINGS	GAMMA RAY		T.C. SEC.	SENS. SETTINGS	NEUTRON	
	FROM	TO				ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.			ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	000	275	13	4	25	0	5 CPS.	4	5	31	25 CPS.
	100	275	<b>REPEAT SECTION - SCALE AS ABOVE.</b>								

REMARKS



# ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

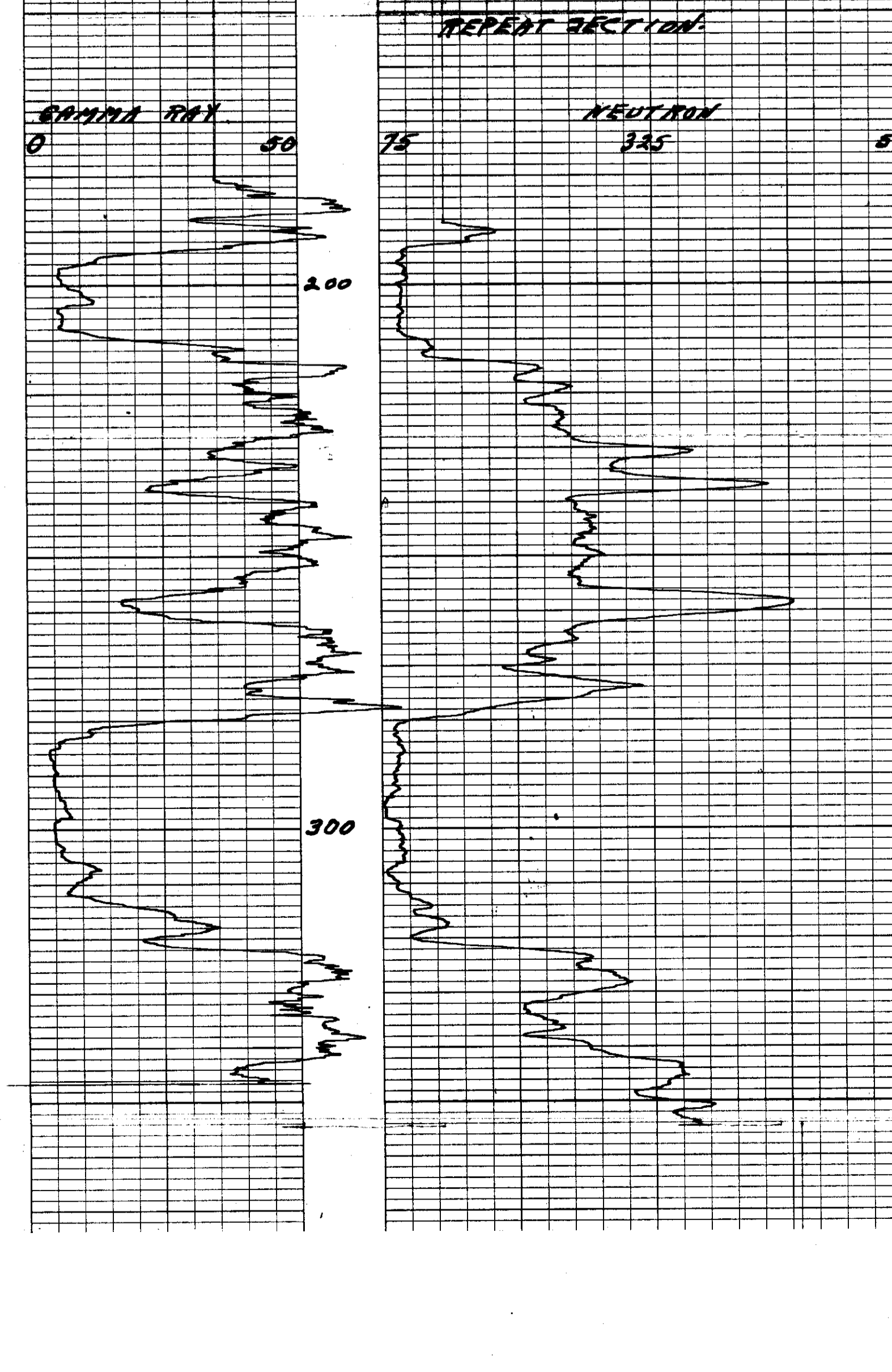
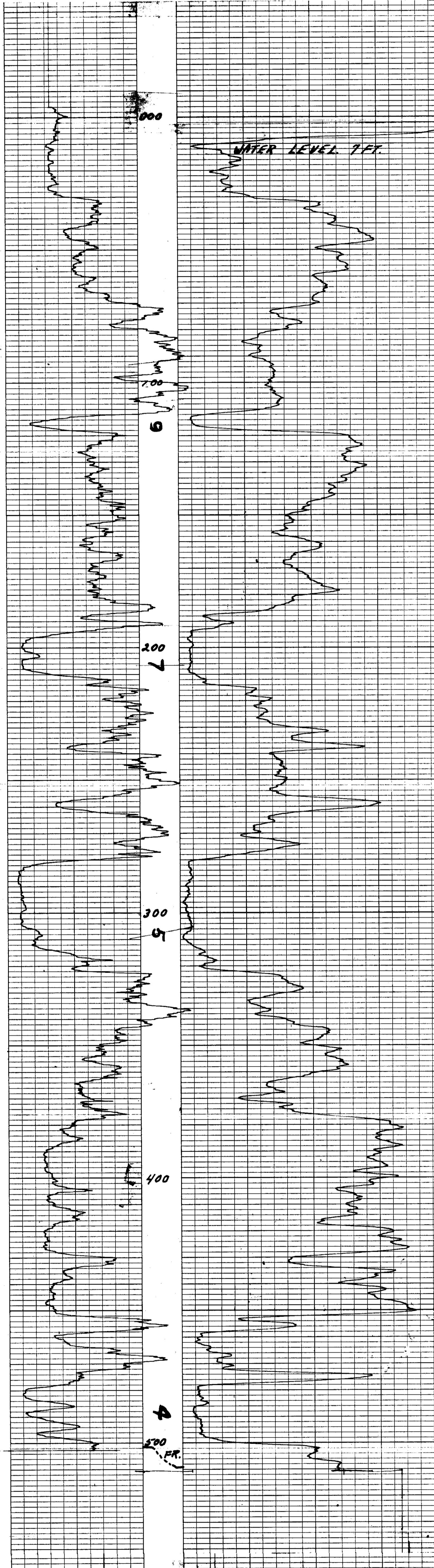
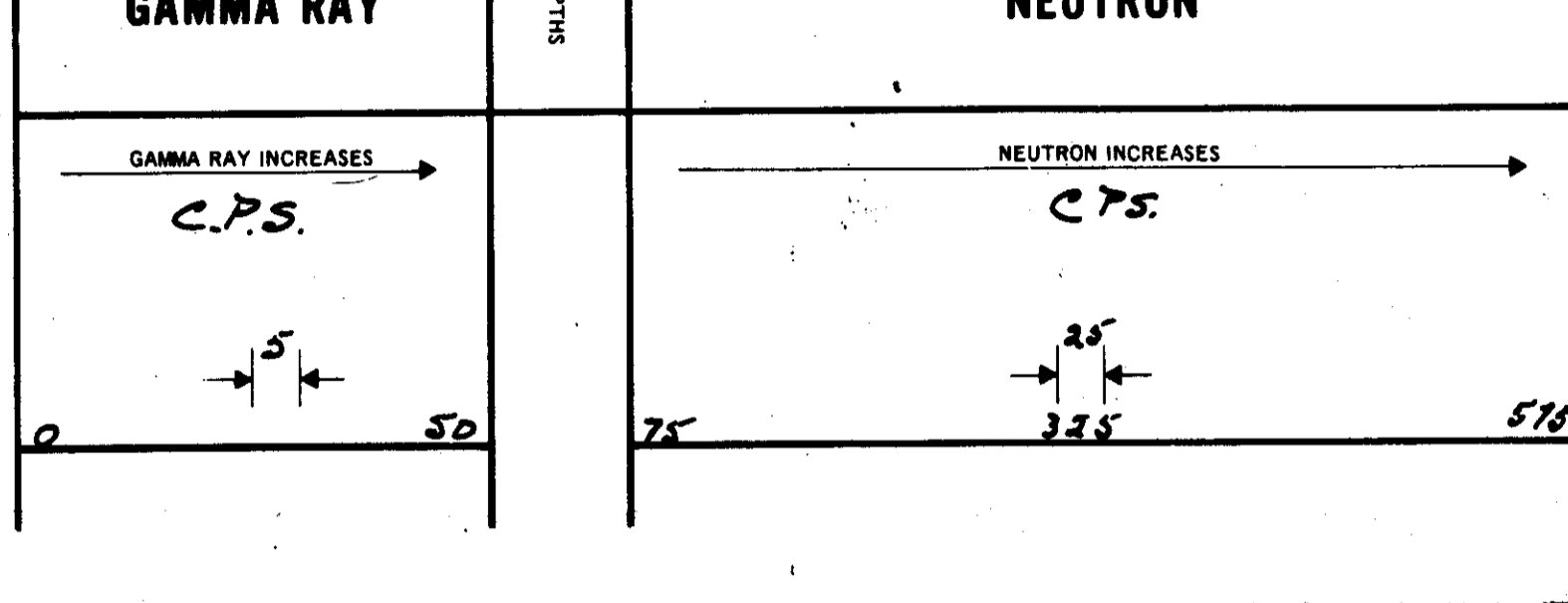
K-LOGS-26318

FILE NO.	COMPANY: <b>FAIRBANKS COAL CO.</b>
WELL: <b>RH-78</b>	LOCATION: <b>ZORRILL MOUNTAIN</b>
TWP: _____	RANGE: _____
N: _____	M: _____
FIELD: <b>FORBINE RIVER</b>	
PROVINCE: <b>BRITISH COLUMBIA</b>	
Permanent Datum: _____	Elev.: _____
Log Measured from: _____	Fl. Above Perm. Datum: _____
Well Depth Measured from: <b>GROUND LEVEL</b>	G.L.: _____
Run No. _____	Date: _____
First Reading: _____	Last Reading: _____
Footage Logged: _____	Depth Reached: _____
Depth Driller: _____	Casing Driller: _____
Fluid Type: _____	Liquid Level: _____
Min. Diam.: _____	
Operating Time: _____	Truck No.: _____
Recorded By: <b>PETERSON</b>	Witnessed By: <b>BURKENDIC</b>

GAMMA RAY				NEUTRON			
RUN NO.	TOOL MODEL NO.	DIAMETER	DETECTOR MODEL NO.	RUN NO.	LOG TYPE	TOOL MODEL NO.	DETECTOR MODEL NO.
		1 1/2	GEIGER		NEUTRON/NEUTRON		1 1/2
	TYPE		LENGTH				TYPE
			18 INCH				PROPORTIONAL
	DISTANCE TO N. SOURCE		8.55 FT				LENGTH
							6 INCH
	SOURCE MODEL NO.						MRC-N-SS-W
	SERIAL NO.						598
	SPACING						19 INCHES
	TYPE						AmBe
	STRENGTH						6.94 x 10 <sup>6</sup> N/S

LOGGING DATA											
GENERAL			GAMMA RAY				NEUTRON				
RUN NO.	FROM	TO	SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	000	509	13	4	25	0	0 CPS	4	5	31	25 CPS
2	200	350	13	4	25	0	0 CPS	4	5	31	25 CPS

REMARKS



# ROKE

GAMMA RAY NEUTRON LOG

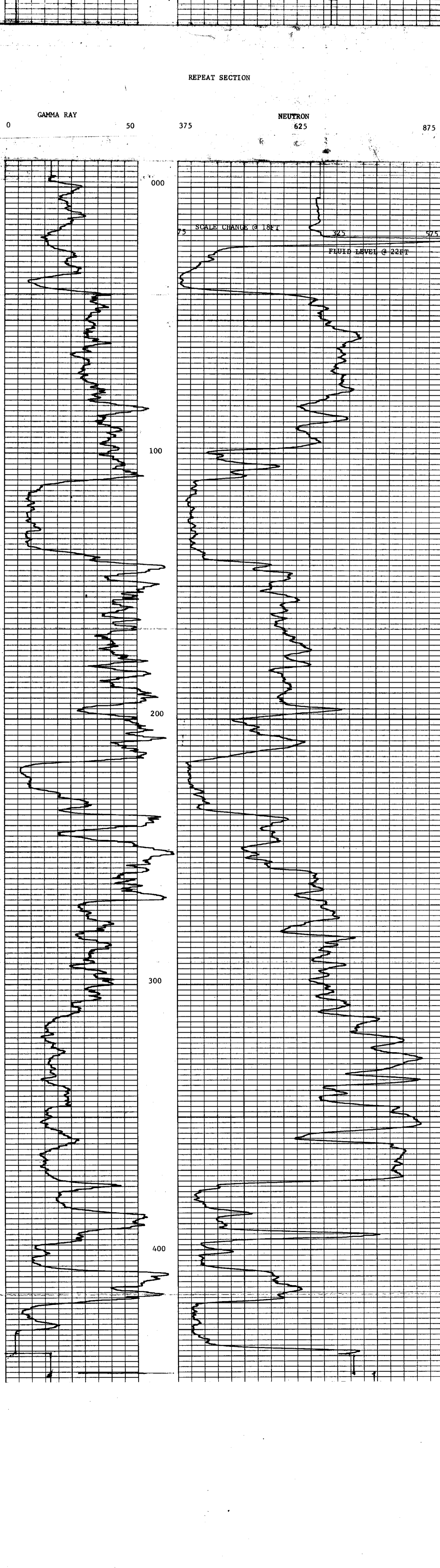
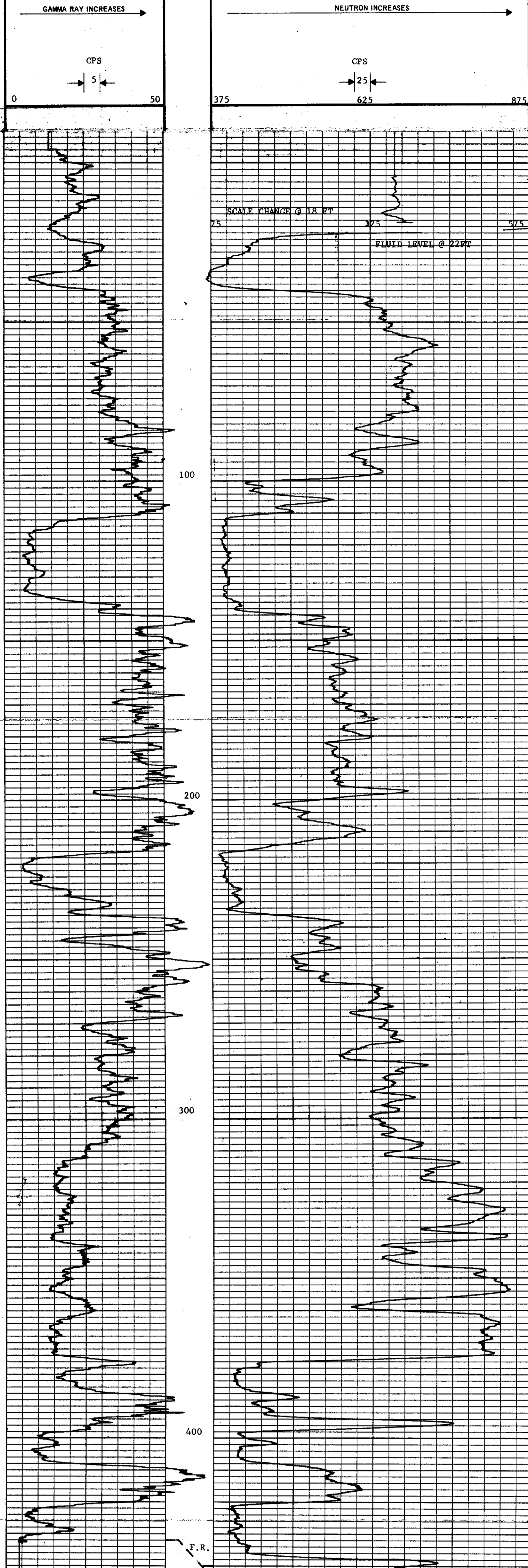
OIL ENTERPRISES LTD. CALGARY ALBERTA

K-Records 76(5)A

FILE NO. \_\_\_\_\_ COMPANY FORBING COAL CO. LTD.  
 WELL 79  
 LOCATION TIRREBILT MOUNTAIN  
 ROE \_\_\_\_\_  
 W \_\_\_\_\_ M \_\_\_\_\_  
 FIELD FORBING RIVER  
 PROVINCE BRITISH COLUMBIA  
 Permanent Datum \_\_\_\_\_ Elev. \_\_\_\_\_ K.B. \_\_\_\_\_  
 Log Measured from \_\_\_\_\_ (GROUND) LEVEL \_\_\_\_\_ F. Above Perm. Datum \_\_\_\_\_ D.F. \_\_\_\_\_  
 Well Depths Measured from \_\_\_\_\_ (GROUND) LEVEL \_\_\_\_\_ C.L. \_\_\_\_\_  
 Run No. \_\_\_\_\_ ONE  
 Date 3 MAR/70  
 First Reading 000  
 Last Reading 000  
 Footage Logged 470  
 Depth Reached 441  
 Depth Driller 479  
 Casing Shoe \_\_\_\_\_  
 Fluid Type MUD  
 Min. Diam. 18  
 Operating Time 4 HOURS  
 Truck No. 10  
 Recorded By PETERSON Witnessed By BUTENCHUK

EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 11/16	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	1 11/16
TYPE	GEIGER	DETECTOR MODEL NO.	
LENGTH	18 INCH	TYPE	FUNCTIONAL
DISTANCE TO N. SOURCE	8.55 FT	LENGTH	6 INCH
		SOURCE MODEL NO.	MRC-N-SS-W
		SERIAL NO.	548
HOIST TRUCK NO.	10	SPACING	19 INCH
INSTRUMENT TRUCK NO.		TYPE	AmBe
TOOL SERIAL NO.	CGN2704A65	STRENGTH	6.94 X 10 <sup>6</sup> N/S

LOGGING DATA											
RUN NO.	GENERAL		GAMMA RAY				NEUTRON				
	DEPTHS FROM	TO	SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	0	18	15	3	25	0	5 cps	3	5	15I	25 cps
	18	440	13	3	25	0	5 cps	3	5	3I	25 cps
2	0	18	13	3	25	0	5 cps	3	5	15I	25 cps
	18	440	13	3	25	0	5 cps	3	5	3I	25 cps



Greenhills  
 RH 84 to RH 102  
 Millings - 88 to 91, 95, & 96, 101  
 ALBERTA

UTRON LOG

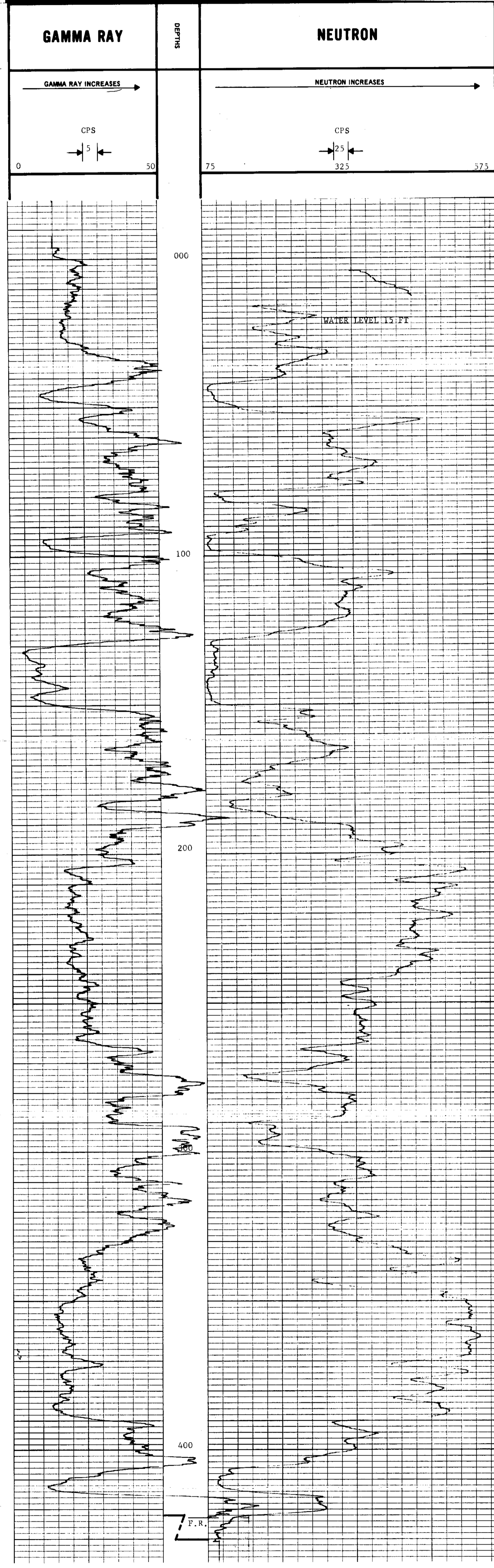
312

FILE NO.	COMPANY	FORDING COAL CO., LTD.
LSD SEC	WELL	RH 84
TWP	LOCATION	GREENHILLS
RGE	RGE	
M	FIELD	FORDING RIVER
	PROVINCE	SASKATCHEWAN
Permanent Datum	GROUND LEVEL	Elev. _____
Log Measured from	GROUND LEVEL	ft. Above Perm. Datum _____
Well Depths Measured from	GROUND LEVEL	G.L. _____
Run No.	ONE	
Date	19 MAR / 70	
Last Reading	130	
Footage Logged	430	
Depth Reached	431	
Depth Driller	630	
Casing Rate		
Casing Driller		
Fluid Type	WATER	
Liquid Level	15	
Min. Diam.		
Operating Time	2 HOURS	
Truck No.	10	
Recorded By	PERKINSON	Witnessed By
		BUTRICK

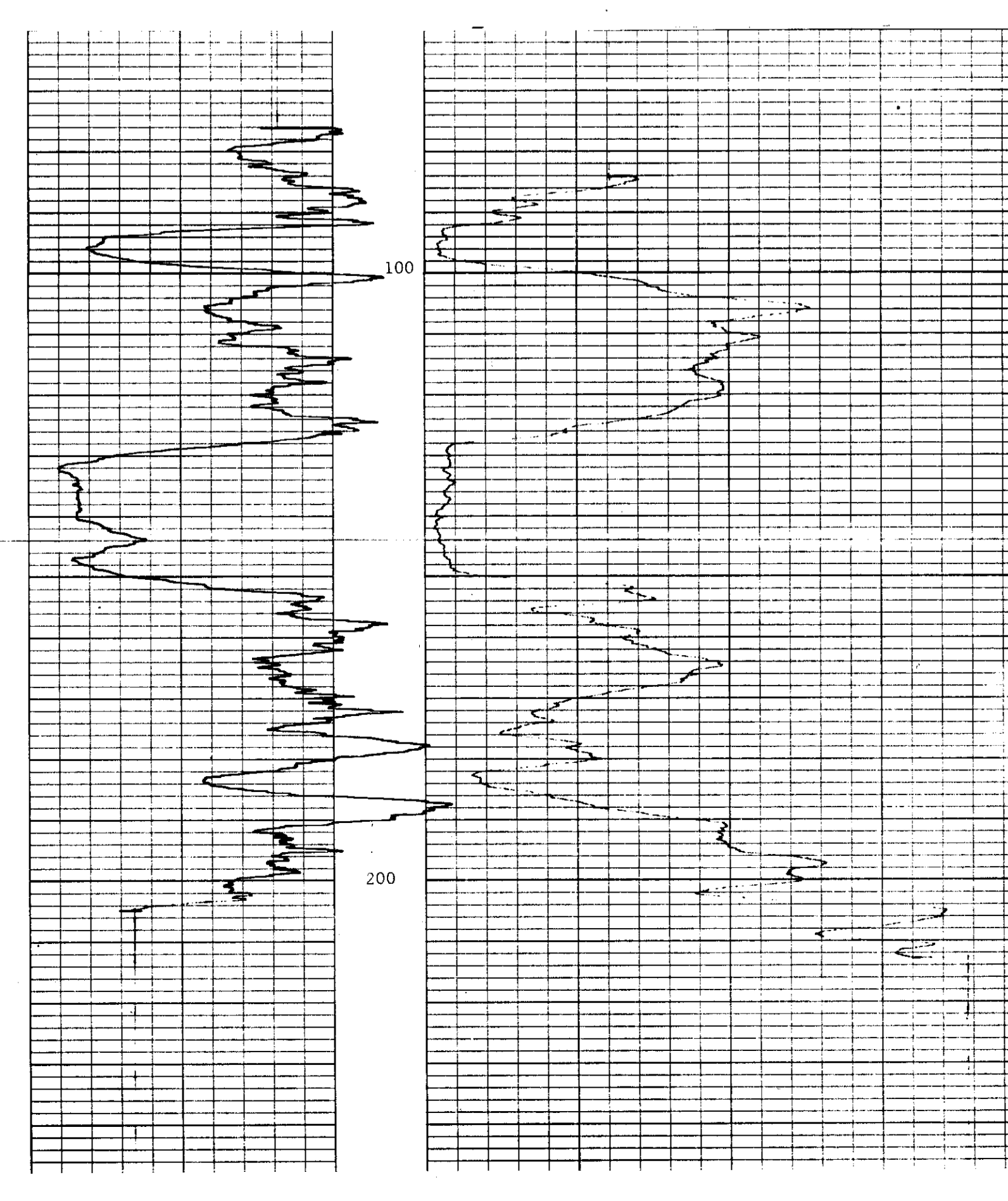
EQUIPMENT DATA					
GAMMA RAY		NEUTRON			
RUN NO.	ONE	RUN NO.	ONE		
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON		
DIAMETER	1 1/2	TOOL MODEL NO.			
DETECTOR MODEL NO.		DIAMETER	1 1/2		
TYPE	GEIGER	DETECTOR MODEL NO.			
LENGTH	18 INCH	TYPE	PROPORTIONAL		
DISTANCE TO N. SOURCE	8.55 FT	LENGTH	6 INCH		
		SOURCE MODEL NO.	MRC-N-SS-W		
		SERIAL NO.	598		
		SPACING	10 INCH		
		TYPE	AmBe		
		STRENGTH	6.94 x 10 <sup>6</sup> N/S		
LOGGING DATA					
GENERAL		GAMMA RAY		NEUTRON	
HOIST TRUCK NO.	10	ZERO DIV. L OR R		ZERO DIV. L OR R	
INSTRUMENT TRUCK NO.		API G.R. UNITS PER LOG DIV.		API N. UNITS PER LOG DIV.	
TOOL SERIAL NO.	CGX27U4A65				

RUN NO.	DEPTHS		SPEED FT/MIN	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
	FROM	TO									
1	000	430	13	4	25	0	5 cps	4	5	3L	25 cps
2	100	200	13	4	25	0	5 cps	4	5	3L	25 cps

REMARKS



REPEAT SECTION



# ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

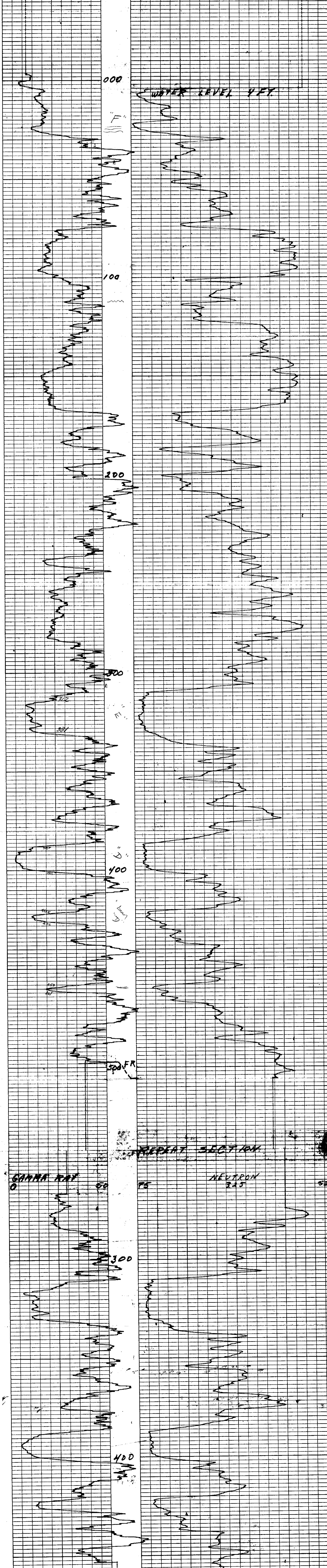
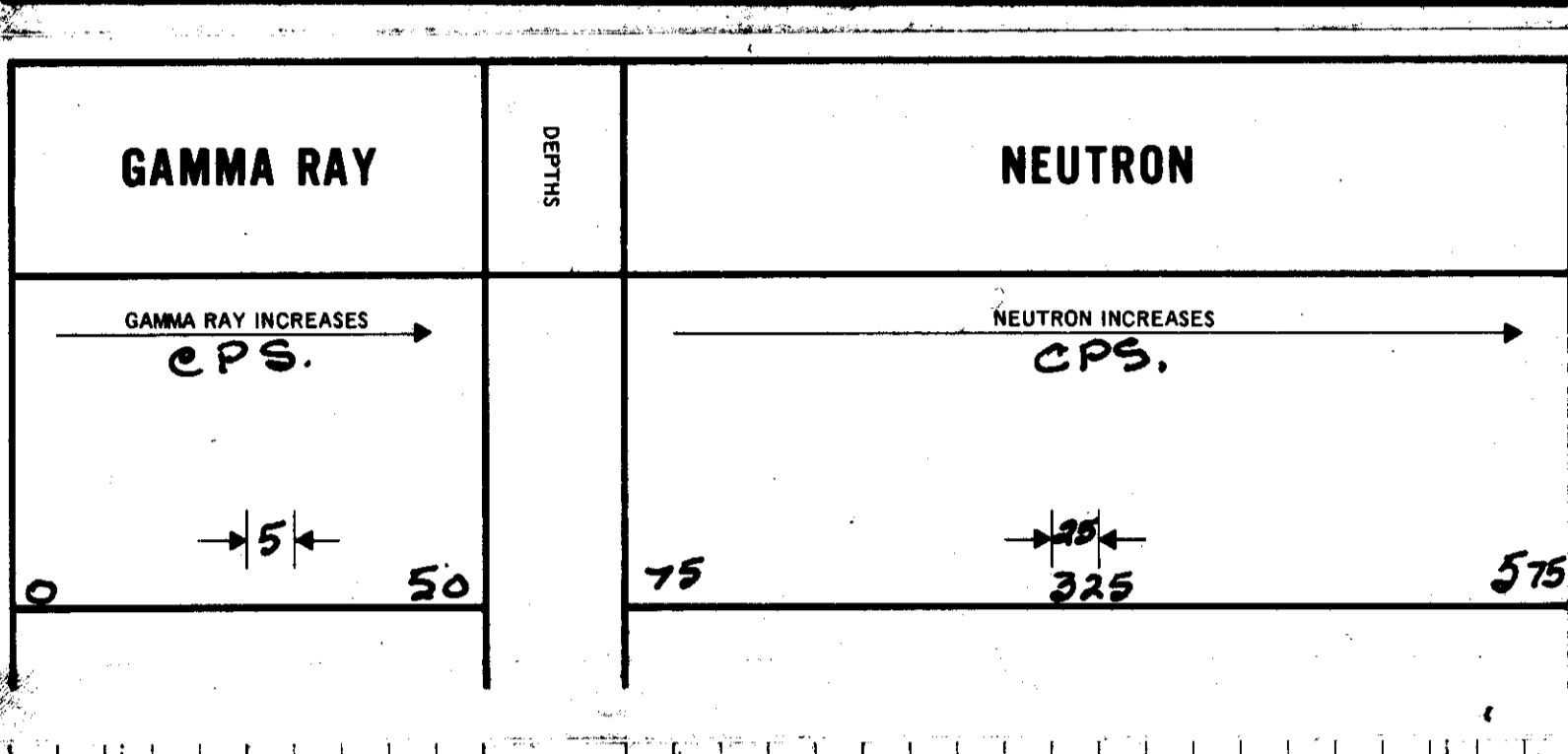
GAMMA RAY NEUTRON LOG

K-Forrestal 2639-1

FILE NO.	COMPANY <b>FORDING COAL CO.</b>
LSD	WELL <b>AH 95</b>
SEC	LOCATION <b>GREEN HILLS</b>
TWP	FIELD <b>FORDING RIVER</b>
RGE	PROVINCE <b>BRITISH COLUMBIA</b>
M	
	Permanent Datum <b>GAMMA LEVEL</b> Ft. Above Perm. Datum
	Well Depths Measured from <b>GAMMA LEVEL</b> G.L.
Run No.	<b>ONE</b>
Date	<b>30 MAR 70</b>
Last Reading	<b>505</b>
Footage Logged	<b>505</b>
Depth Reached	<b>504</b>
Depth Driller	<b>516</b>
Casing Role	
Casing Driller	<b>WATER</b>
Fluid Type	<b>WATER</b>
Liquid Level	<b>4 FT</b>
Min. Diam.	
Operating Time	<b>2 HRS.</b>
Truck No.	<b>10</b>
Recorded By <b>PETERSON</b>	Witnessed By <b>BUTRENEWIK</b>

EQUIPMENT DATA		GAMMA RAY		NEUTRON	
RUN NO.	<b>ONE</b>	RUN NO.	<b>ONE</b>	LOG TYPE	<b>NEUTRON/NEUTRON</b>
TOOL MODEL NO.	<b>1 1/16</b>	TOOL MODEL NO.	<b>1 1/16</b>	DIAMETER	<b>1 1/16</b>
DETECTOR MODEL NO.		DETECTOR MODEL NO.		TYPE	<b>PROPORTIONAL</b>
TYPE	<b>GEIGER</b>	TYPE		LENGTH	<b>6 INCH</b>
LENGTH	<b>18 INCH</b>	SOURCE MODEL NO.		SERIAL NO.	<b>MAC-N-SS-W</b>
DISTANCE TO N. SOURCE	<b>8.55 FT.</b>	SPACING		TYPE	<b>598</b>
GENERAL		GENERAL		NEUTRON	
HOIST TRUCK NO.	<b>10</b>	HOIST TRUCK NO.	<b>10</b>	SPACING	<b>19 INCHES</b>
INSTRUMENT TRUCK NO.		INSTRUMENT TRUCK NO.		TYPE	<b>AMR 96</b>
TOOL SERIAL NO.	<b>CGN274465</b>	TOOL SERIAL NO.	<b>CGN274465</b>	STRENGTH	<b>6.94 X 10<sup>6</sup> N/S</b>

LOGGING DATA		GAMMA RAY		NEUTRON					
RUN NO.	DEPTHS	SPEED	T.C.	ZERO	API G.R. UNITS	T.C.	SENS.	ZERO	API N. UNITS
	FROM	FT/MIN	SEC.	DIV. L OR R	*PER LOG DIV.	SEC.	SETTINGS	DIV. L OR R	PER LOG DIV.
1	000	505	13	4	25	0	5 CPS.	4	5
2	800	450	10	4	25	0	5 CPS.	4	5



# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

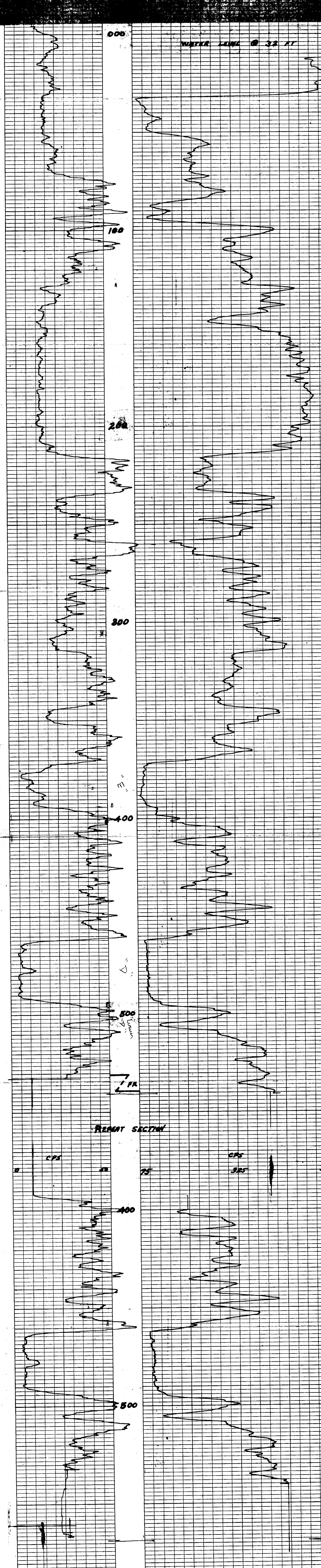
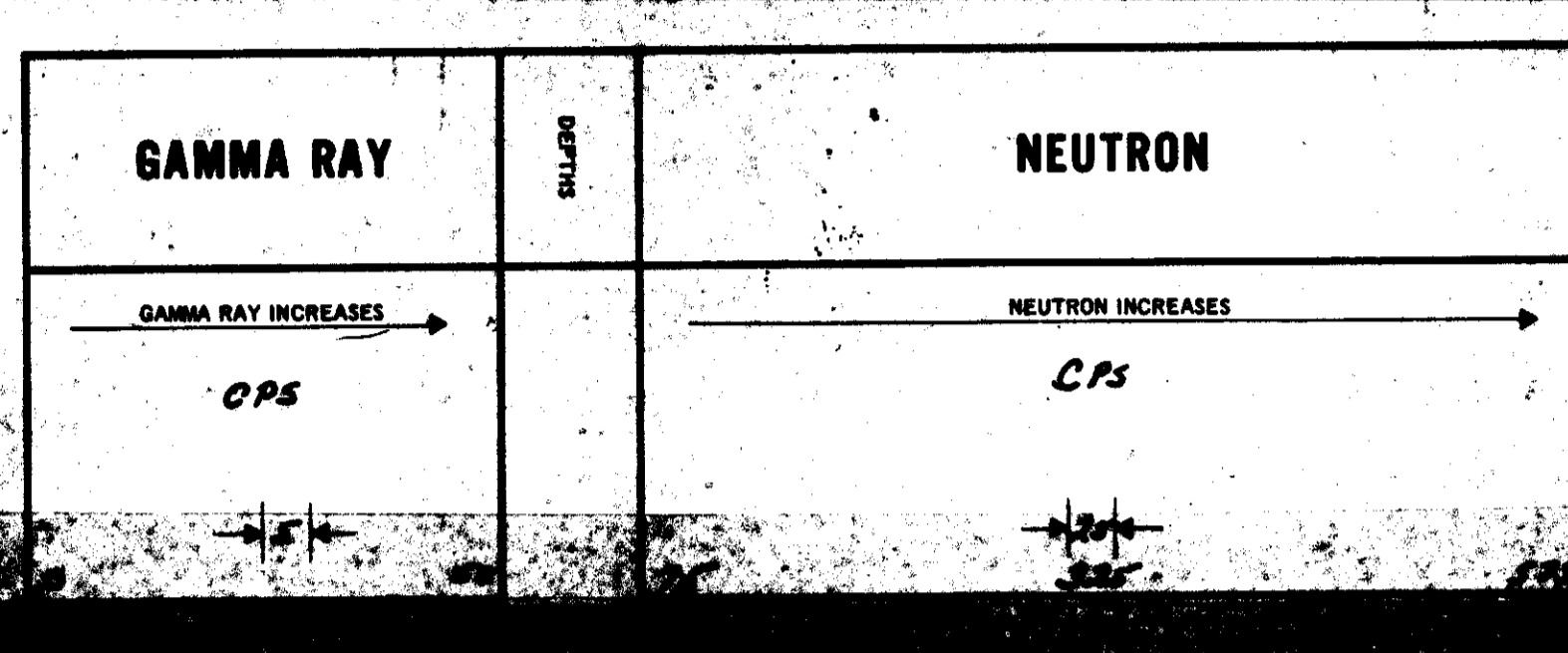
K. Stewart 7/5/61

FILE NO.	COMPANY	FOODING COAL CO LTD
WELL	RY 86	
LOCATION	GREENHILLS	
FIELD	FOODING HILLS	
PROVINC	BRITISH COLUMBIA	
LOG APPROVED BY	S. J. L. LEWIS	
DATE	25 MAR 70	
FIRST READING	8:52	
LAST READING	0	
FOOTAGE LOGGED	539	
DEPTH REACHED	539	
DEPTH DRILLER	539	
GRINDING-JOBE		
CHANGING DRILLER		
FLUID TYPE	WATER	
LIQUID LEVEL	32	
MIN. DIAM.		
OPERATING TIME	2 HRS	
TRUCK NO.	10	
RECORDED BY	PATRICKSON	
WITNESSED BY	ROBINSON	

EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/2	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	1 1/2
TYPE	GEIGER	DETECTOR MODEL NO.	
LENGTH	18 INCH	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	8.85 FT	LENGTH	6 INCH
		SOURCE MODEL NO.	MRC-N-55-W
GENERAL		SERIAL NO.	998
HOIST TRUCK NO.	10	SPACING	19 INCH
INSTRUMENT TRUCK NO.		TYPE	AmBe
TOOL SERIAL NO.	CGK 22 USA 65	STRENGTH	6.94 x 10 <sup>6</sup> N/S

LOGGING DATA											
GENERAL			GAMMA RAY				NEUTRON				
RUN NO.	DEPTHS FROM	TO	SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	0	539	13	4	25	0	5 CPS	4	5	36	25 CPS
	400	539	REPEAT SECTION		AS ABOVE						





# ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

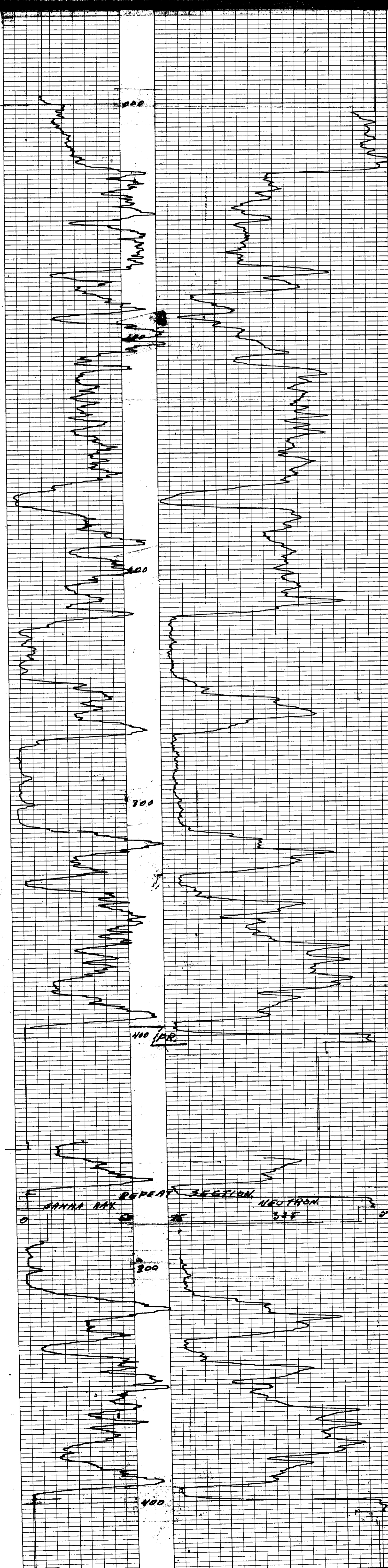
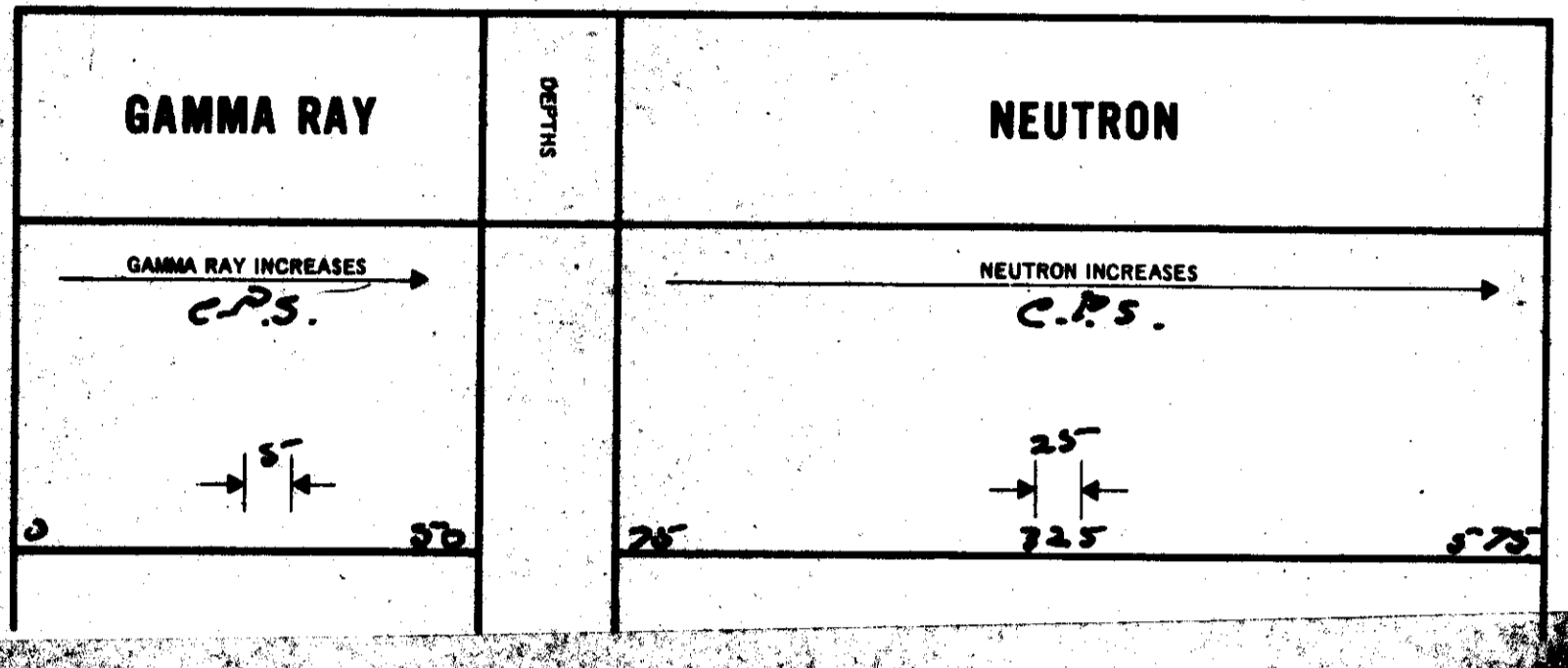
K-56000-70(3)A-1

FILE NO. \_\_\_\_\_  
 COMPANY **FORBING COAL CO. LTD.**  
 WELL **RH. 87.**  
 LOCATION **GREEN HILLS.**  
 FIELD **FORBING RIVER.**  
 PROVINCE **B.C.**  
 Log Measured from **6 1/2" O.D. LEVEL.** Elev. \_\_\_\_\_ K.B. \_\_\_\_\_  
 Well Depths Measured from **GROUND LEVEL.** D.F. \_\_\_\_\_  
 C.L. \_\_\_\_\_  
 Run No. **01E.**  
 Date **22 APR 1960**  
 First Reading **404**  
 Last Reading **000**  
 Footage Logged **404**  
 Depth Reached **405**  
 Depth Driller **405**  
 Casing Hole \_\_\_\_\_  
 Casing Driller \_\_\_\_\_  
 Fluid Type **WATER**  
 Liquid Level **004 FT.**  
 Min. Diam. \_\_\_\_\_  
 Operating Time **2 HRS**  
 Truck No. **10**  
 Recorded By **PETERSON** Witnessed By **PETERSON**

EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	<b>ONE</b>	RUN NO.	<b>ONE</b>
TOOL MODEL NO.		LOG TYPE	<b>NEUTRON/NEUTRON</b>
DIAMETER	<b>1 1/2</b>	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	<b>1 1/2</b>
TYPE	<b>GEIGER</b>	DETECTOR MODEL NO.	
LENGTH	<b>18 INCH</b>	TYPE	<b>PROPORTIONAL</b>
DISTANCE TO N. SOURCE	<b>8.55 FT</b>	LENGTH	<b>6 INCH</b>
GENERAL		SOURCE MODEL NO.	<b>MRC-N-SS-W</b>
HOIST TRUCK NO.	<b>10</b>	SERIAL NO.	<b>598</b>
INSTRUMENT TRUCK NO.		SPACING	<b>17 INCH.</b>
TOOL SERIAL NO.	<b>CR277MPLS.</b>	TYPE	<b>AmBe</b>
		STRENGTH	<b>6.94 x 10<sup>6</sup> N/S</b>

LOGGING DATA											
GENERAL			GAMMA RAY				NEUTRON				
RUN NO.	DEPTHS FROM	TO	SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
<b>1</b>	<b>000</b>	<b>404</b>	<b>12</b>	<b>4</b>	<b>25</b>	<b>0</b>	<b>5 CPS.</b>	<b>4</b>	<b>5</b>	<b>32</b>	<b>25 CPS.</b>
	<b>300</b>	<b>404</b>	<b>(REPEAT SECTION - SCALED AS ABOVE.)</b>								



# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

COMPANY **FRANK COAL LIMITED**

WELL **D.A.H. # 92**

LOCATION **GREENHILLS**

FIELD **FORDING RIVER**

PROVINCE **BRITISH COLUMBIA**

Permanent Datum **GREENO LEVEL** Elev. **1000** K.B. **1000**

Log Measured from **GREENO LEVEL** Elev. **1000** O.F. **1000**

Well Depth Measured from **GREENO LEVEL** G.L. **1000**

Run No. **045**

Date **11/23/50**

First Reading **783**

Last Reading **000**

Footage Logged **793**

Depth Reached **784**

Depth Driller **781**

Casing Driller **781**

Fluid Type **WATER**

Liquid Level **182.1**

Mfr. Diam. **1 1/2**

Operating Time **4 HRS.**

Truck No. **10**

Recorded by **PETERSON**

Witnessed by **REINSON**

WELL DEPTH: **312**

### EQUIPMENT DATA

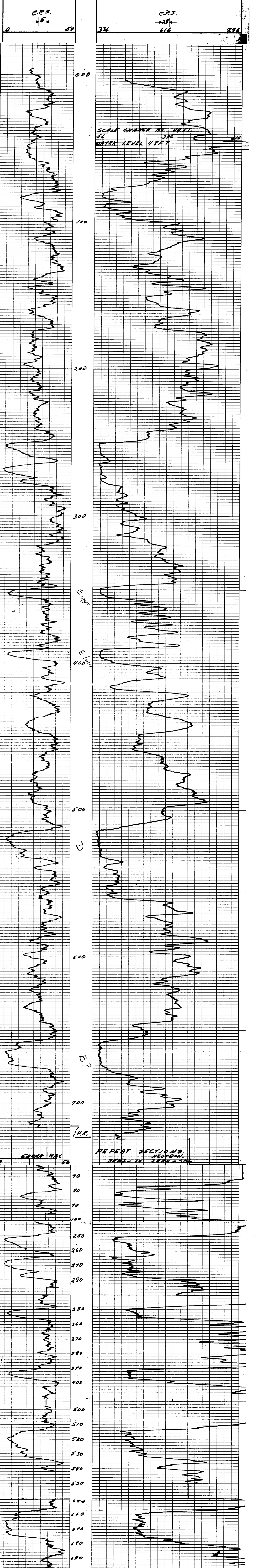
GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/2	TOOL MODEL NO.	
DETECTOR MODEL NO.	GEIGER	DIAMETER	1 1/2
TYPE	18 INCH	DETECTOR MODEL NO.	
LENGTH	8.55 FT	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE		LENGTH	6 INCH
		SOURCE MODEL NO.	MRC-N-SS-W
		SERIAL NO.	598
		SPACING	15 INCH
		TYPE	AmBe
		STRENGTH	6.94 x 10 <sup>6</sup> N/S

### LOGGING DATA

GENERAL		GAMMA RAY				NEUTRON				
RUN NO.	DEPTHS	SPEED	T.C.	SENS.	ZERO	API G R UNITS	T.C.	SENS.	ZERO	API N. UNITS
NO.	FROM	FT/MIN	SEC	SETTINGS	DIV. L OR R	PER LOG DIV	SEC.	SETTINGS	DIV. L OR R	PER LOG DIV.
1	000	44	11	4	25	0	6 CPS	4	4	124
	44	723	11	4	25	0	5 CPS	4	4	28 CPS
REPEAT SECTIONS:		EXPANDED NEUTRON.								
			11	4	25	0	5 CPS	4	10	504.

REMARKS

REPEAT SECTIONS RUN WITH 12 INCH SPACING. DIAL AT 160.



REPEAT SECTIONS: NEUTRON. 2825-10 ZERO-504.

GAMMA RAY

# ROKE

GAMMA RAY NEUTRON LOG

K-Facbook 76(3)9-1

OIL ENTERPRISES LTD. CALGARY, ALBERTA

COMPANY **FORDING COAL LIMITED.**

WELL **R.H. 94.**

LOCATION **GREENHILLS**

FIELD **FORDING RIVER.**

## 312

PROVINCE **BRITISH COLUMBIA.**

PERMANENT DATUM **GRAND LEVEL.**

LOG MEASURED FROM **GRAND LEVEL.**

WELL DEPTHS MEASURED FROM

DATE **5 SEP/70.**

FIRST READING **550**

LAST READING **000**

FOOTAGE LOGGED **550**

DEPTH REACHED **551**

DEPTH DRILLER

CASING DRILLER

FLUID TYPE **WATER.**

LIQUID LEVEL **3151.**

MIN. DIAM.

OPERATING TIME **3 HRS.**

TRUCK NO. **20**

RECORDED BY **THORSDY**

WITNESSED BY **NEWMAN.**

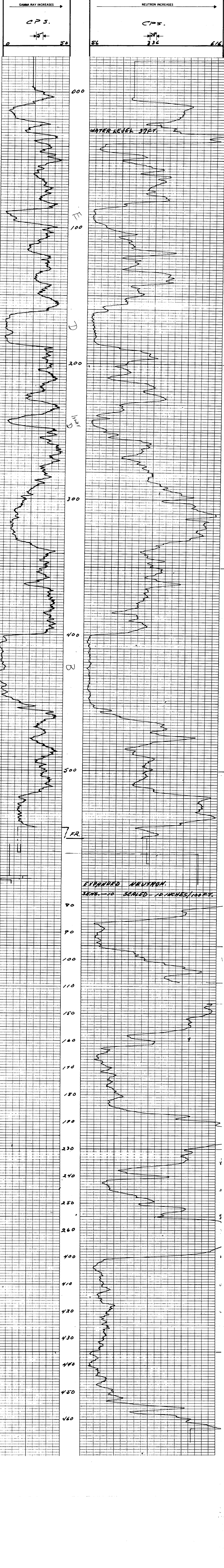
### EQUIPMENT DATA

GAMMA RAY				NEUTRON			
RUN NO.	<b>018</b>			RUN NO.	<b>006</b>		
TOOL MODEL NO.	<b>1 1/2</b>			LOG TYPE	<b>NEUTRON/NEUTRON</b>		
DIAMETER	<b>1 1/2</b>			TOOL MODEL NO.	<b>1 1/2</b>		
DETECTOR MODEL NO.	<b>GEIGER</b>			DETECTOR MODEL NO.	<b>PROPORTIONAL</b>		
TYPE	<b>18 INCH</b>			LENGTH	<b>6 INCH</b>		
LENGTH	<b>8.55 FT</b>			SOURCE MODEL NO.	<b>MRC-N-SS-W</b>		
DISTANCE TO N. SOURCE				SERIAL NO.	<b>578</b>		
GENERAL				SPACING	<b>18 INCH.</b>		
HOIST TRUCK NO.	<b># 20</b>			TYPE	<b>AmBe</b>		
INSTRUMENT TRUCK NO.				STRENGTH	<b>6.94 x 10<sup>6</sup> N/S</b>		
TOOL SERIAL NO.	<b>CANADIAN</b>						

### LOGGING DATA

GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED FT/MIN	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API G R UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N UNITS PER LOG DIV.
1	000	550	11	4	35	0	5 CPS.	4	4	24	35 CPS.

REMARKS **INTERVALS OVER COAL BEDS - 12 INCH SPACING. SENS - 10. SCALED - 10 INCHES PER 100 FT.**



# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

K- Forecast 72/3/21

FILE NO. \_\_\_\_\_  
 COMPANY FORDING COAL LIMITED  
 WELL RH 95  
 TWP GREENHILLS  
 RGE \_\_\_\_\_  
 M \_\_\_\_\_  
 FIELD FORDING RIVER

## 312

PROVINCE BRITISH COLUMBIA

Permanent Datum GRAND LEVER Elev. \_\_\_\_\_  
 Log Measured from CHANDLER TRAIL Ft. Above Perm. Datum D.F. \_\_\_\_\_  
 Well Depth Measured from \_\_\_\_\_ G.L. \_\_\_\_\_

Run No. ONE  
 Date 12 SEPT 70  
 First Reading 447  
 Last Reading 0  
 Footage Logged 447  
 Depth Reached 438

Casing Driller \_\_\_\_\_  
 Fluid Type WATER  
 Liquid Level 61 FT  
 Min. Diam. \_\_\_\_\_  
 Operating Time 3 HOURS  
 Truck No. 20  
 Recorded By PETERSON Witnessed By TAPLIN

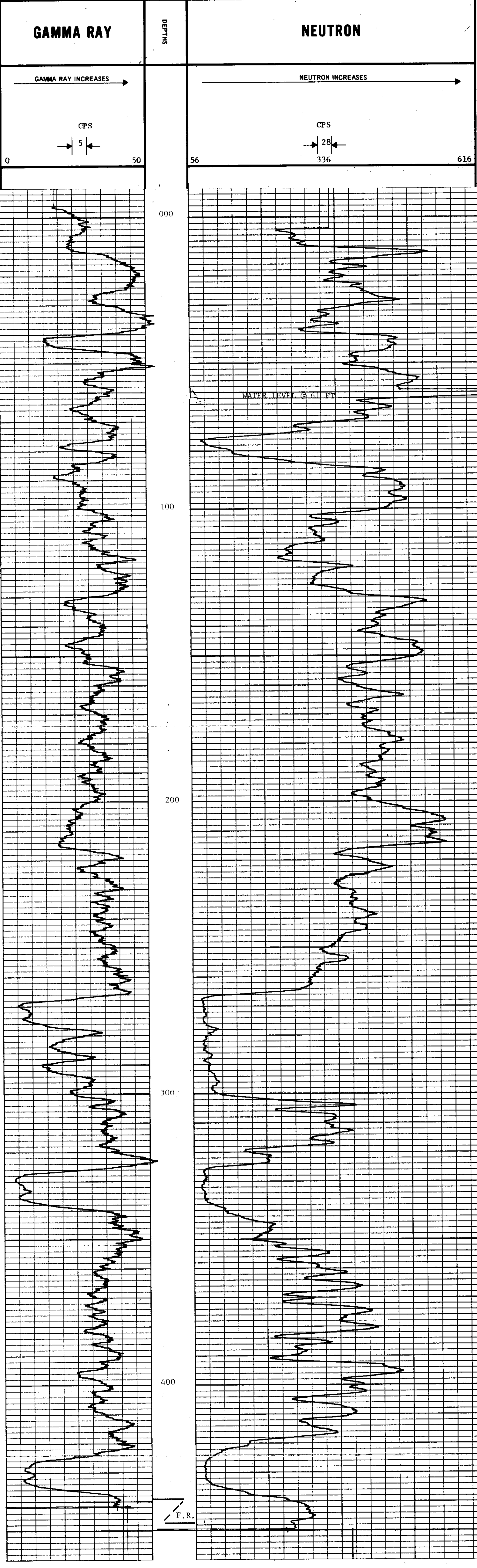
### EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/2	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	1 1/2
TYPE	GEIGER	DETECTOR MODEL NO.	
LENGTH	18 INCH	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	8.55 FT	LENGTH	6 INCH
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	598
HOIST TRUCK NO.	20	SPACING	19 INCH
INSTRUMENT TRUCK NO.		TYPE	AmBe
TOOL SERIAL NO.	CQR27U4A65	STRENGTH	6.94 x 10 <sup>6</sup> N/S

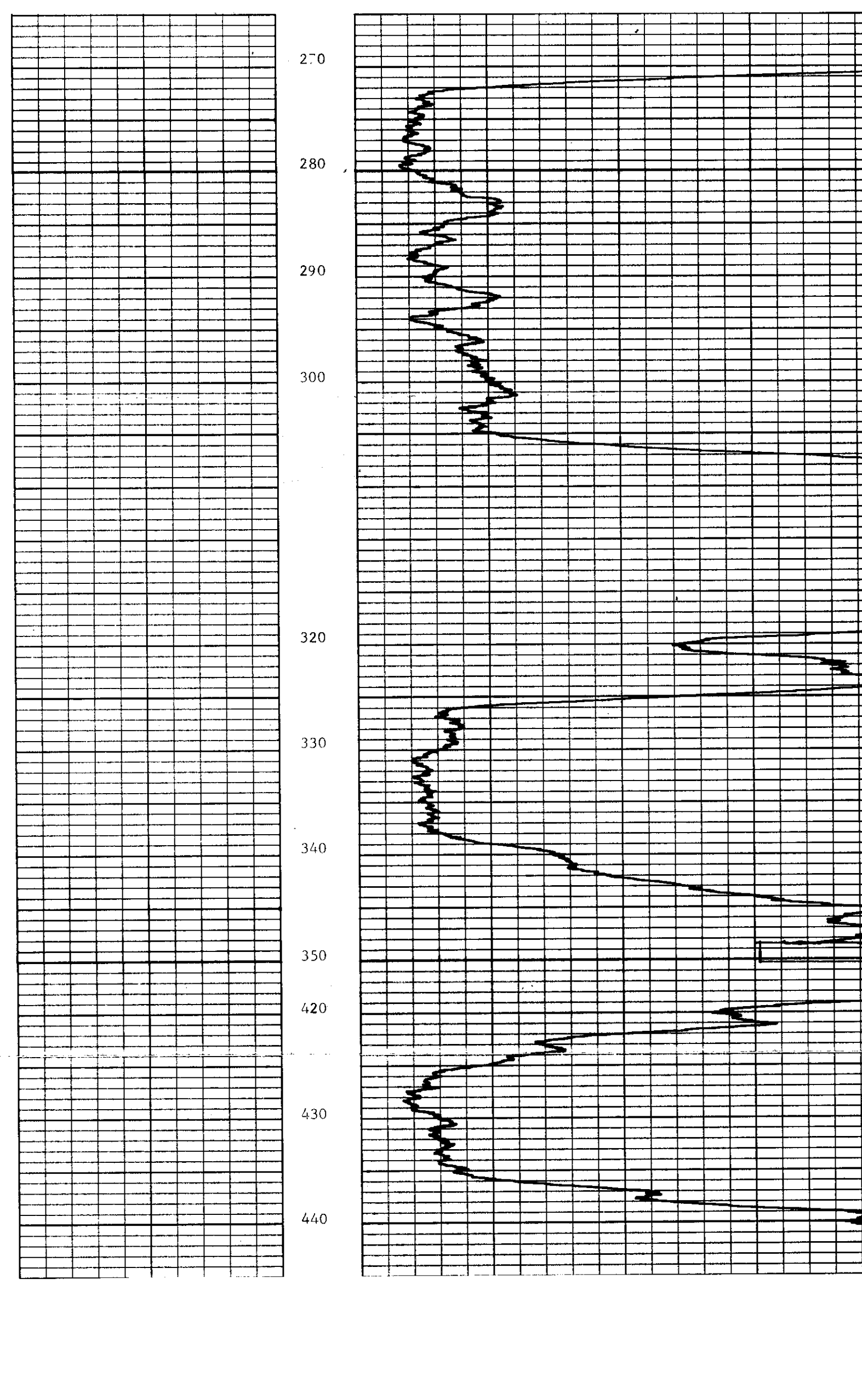
### LOGGING DATA

RUN NO.	GENERAL		GAMMA RAY				NEUTRON				
	DEPTHS FROM	TO	SPEED FT/MIN	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
J	000	457	11	4	25	0	5 CPS	4	4	73	28 CPS

REMARKS



### REPEAT SECTIONS - EXPANDED NEUTRON



# ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

K-FACTORS 2013/1-1

FILE NO. COMPANY **PARSONS COAL CO. LTD.**

WELL **RH 97**

LOCATION **GREENHILLS**

FIELD **FORDING RIVER**

PROVINCE **BRITISH COLUMBIA**

Log Measured from **GROUND LEVEL** Elev. \_\_\_\_\_

Well Depths Measured from **GROUND LEVEL** O.L. \_\_\_\_\_

Run No. **ONE**

Date **25-MAR-78**

First Reading **457**

Last Reading **000**

Footage Logged **457**

Depth Reached **460**

Depth Driller **KEB**

Casing Driller **CHATER**

Fluid Type **SLT**

Liquid Level **37 FT.**

Mm. Diam. \_\_\_\_\_

Operating Time **2 HRS.**

Truck No. **10**

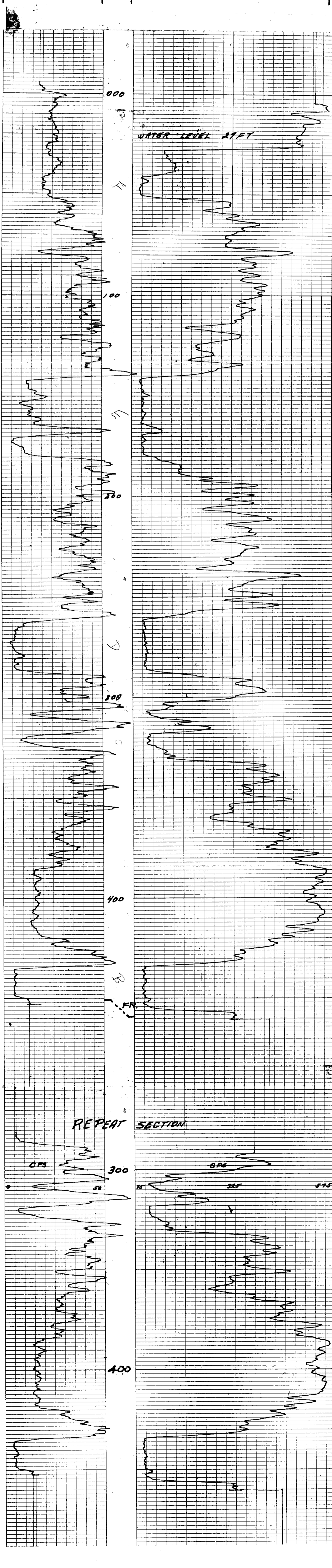
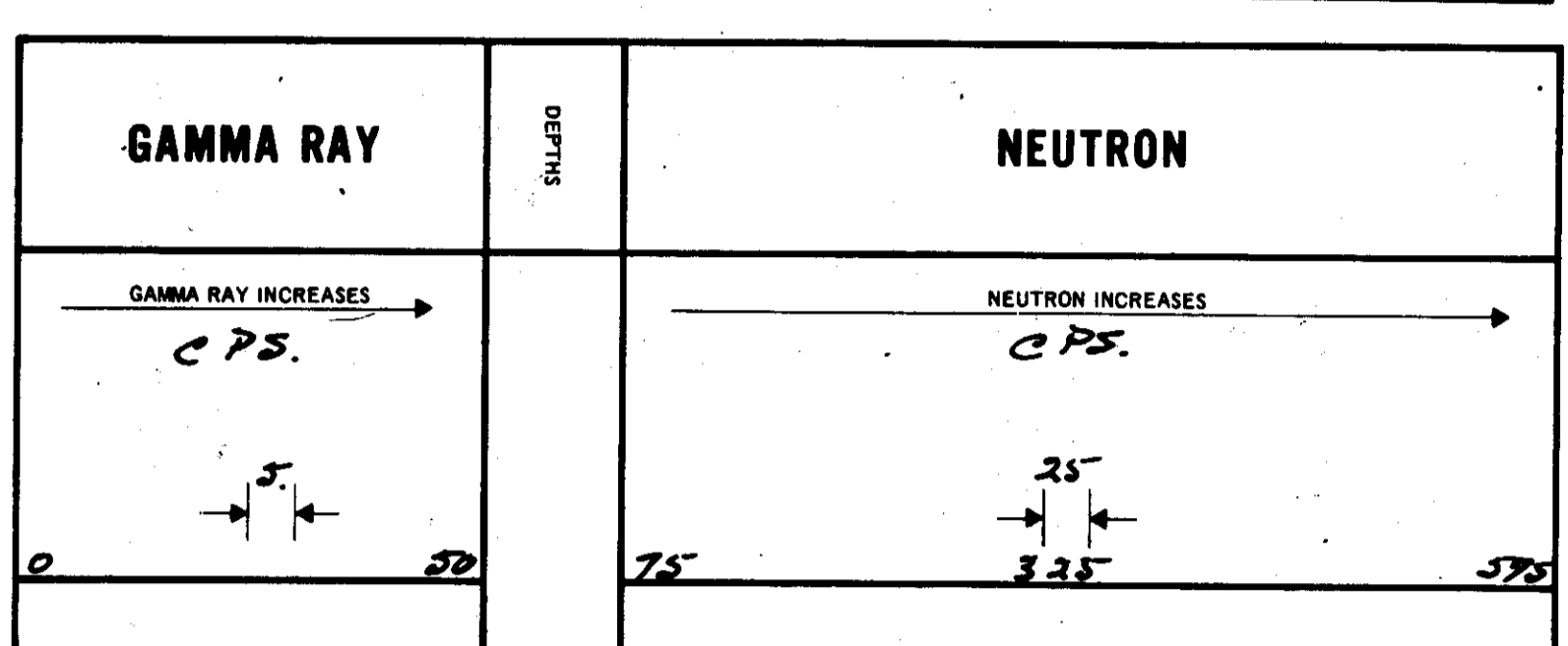
Recorded By **TELFORD** Witnessed By **PEARSON**

# 302

EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/2	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	1 1/2
TYPE	GEIGER	DETECTOR MODEL NO.	
LENGTH	18 INCH	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	8.55 FT	LENGTH	6 INCH
GENERAL		SOURCE MODEL NO.	MRC-N-SS-W
HOIST TRUCK NO.	10	SERIAL NO.	598
INSTRUMENT TRUCK NO.		SPACING	17 INCHES
TOOL SERIAL NO.	C6N270465	TYPE	AmBe
		STRENGTH	6.94 x 10 <sup>6</sup> N/S

LOGGING DATA											
GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	DEPTHS		SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	000	457	13	4	25	0	5 CPS	4	5	32	25 CPS
2	300	457	13	4	25	0	5 CPS	4	5	32	25 CPS



# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

COMPANY **FORDING COAL CO.**

WELL **RH98**

LOCATION **GREEN HILLS**

FIELD **FORDING RIVER**

PROVINCE **BRITISH COLUMBIA**

# 312

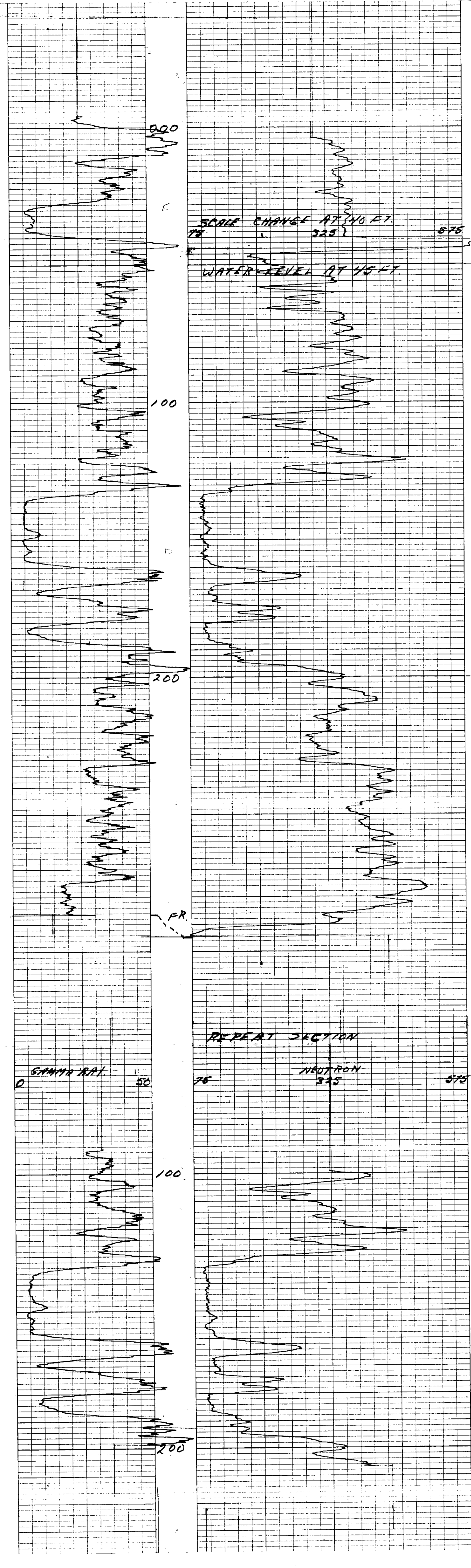
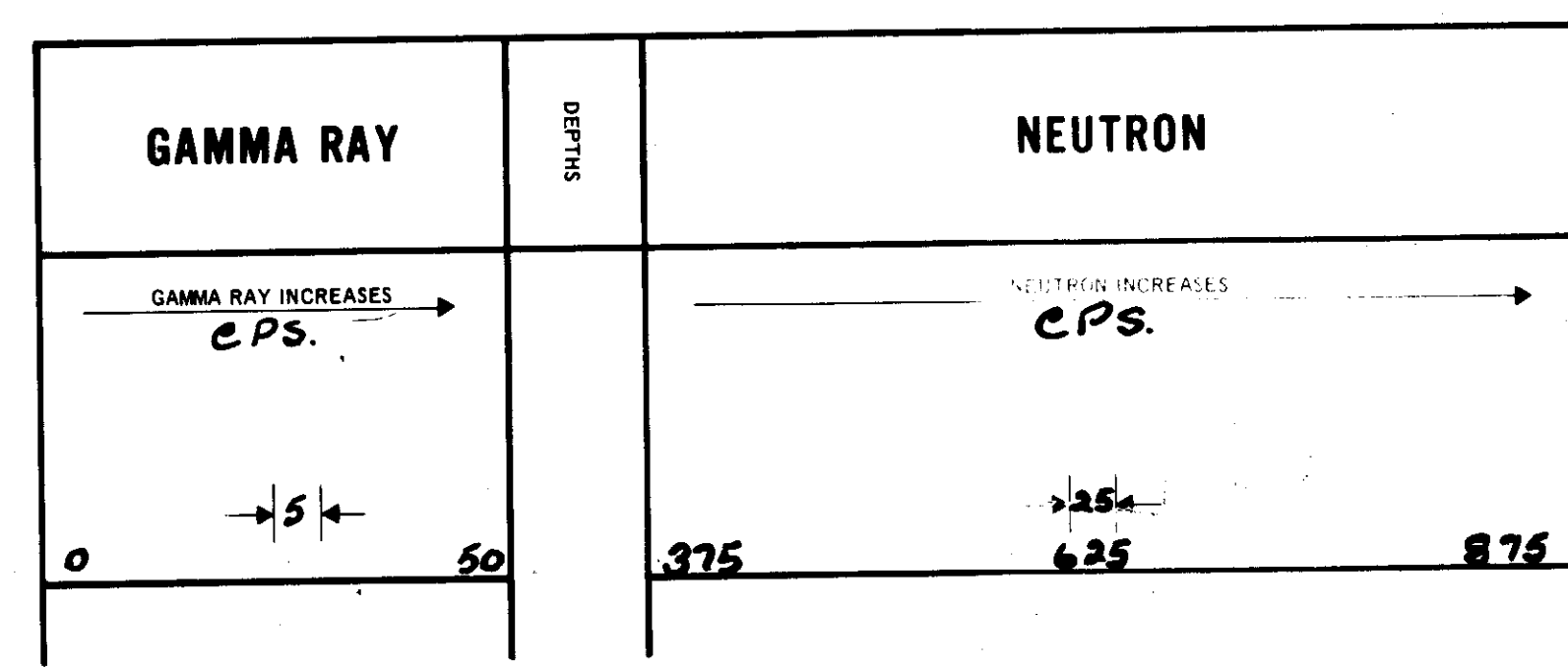
K-FOOTING 70(3)A-1

FILE NO.	
LOG MEASURED FROM	<b>GROUND LEVEL</b>
WELL DEPTHS MEASURED FROM	<b>GROUND LEVEL</b>
DATE	<b>ONE</b>
DATE	<b>19 MAR 70</b>
LAST READING	<b>000</b>
FOOTAGE LOGGED	<b>295</b>
DEPTH REACHED	<b>296</b>
DEPTH DRILLER	<b>370</b>
CASING DRILLER	
FLUID TYPE	<b>WATER</b>
LIQUID LEVEL	<b>45 FT.</b>
MIN. DIAM.	
OPERATING TIME	<b>2 HRS.</b>
TRUCK NO.	<b>10</b>
RECORDED BY	<b>PETERSON</b>
WITNESSED BY	<b>BUTRECHUK</b>

EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	<b>ONE</b>	RUN NO.	<b>ONE</b>
TOOL MODEL NO.		LOG TYPE	<b>NEUTRON/NEUTRON</b>
DIAMETER	<b>1 1/8</b>	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	<b>1 1/8</b>
TYPE	<b>GEIGER</b>	DETECTOR MODEL NO.	
LENGTH	<b>18 INCH</b>	TYPE	<b>PROPORTIONAL</b>
DISTANCE TO N. SOURCE	<b>8.55 FT</b>	LENGTH	<b>6 INCH</b>
		SOURCE MODEL NO.	<b>MRC-N-SS-W</b>
		SERIAL NO.	<b>598</b>
HOIST TRUCK NO.	<b>10</b>	SPACING	<b>19 INCHES</b>
INSTRUMENT TRUCK NO.		TYPE	<b>AmBe</b>
TOOL SERIAL NO.	<b>CQN274465</b>	STRENGTH	<b>6.94 x 10<sup>6</sup> N/S</b>

LOGGING DATA											
GENERAL			GAMMA RAY				NEUTRON				
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API GR UNITS PER LOG DIV	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	000	040	13	4	25	0	5 CPS.	4	5	15 L	25 CPS.
	040	295	13	4	25	0	5 CPS.	4	5	3 L	25 CPS.
2	100	200	13	4	25	0	5 CPS.	4	5	3 L	25 CPS.



# ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

COMPANY **FORDING COAL LIMITED**

WELL **RH 99**

LOCATION **CREEFHILLS**

FIELD **FORDING RIVER**

## 312

PROVINCE **BRITISH COLUMBIA**

Permitment Datum **GROUND LEVEL** Elev. \_\_\_\_\_  
 Log Measured from **GROUND LEVEL** Ft. Above Perm. Datum \_\_\_\_\_  
 Well Depths Measured from \_\_\_\_\_

K.B. \_\_\_\_\_  
 O.P. \_\_\_\_\_  
 C.L. \_\_\_\_\_

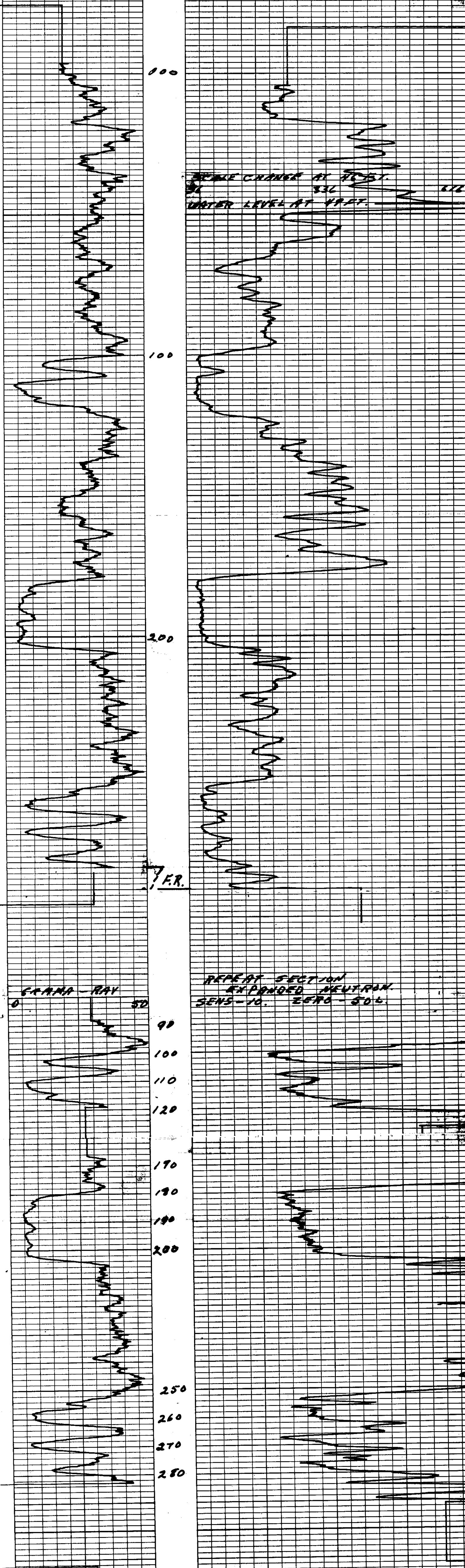
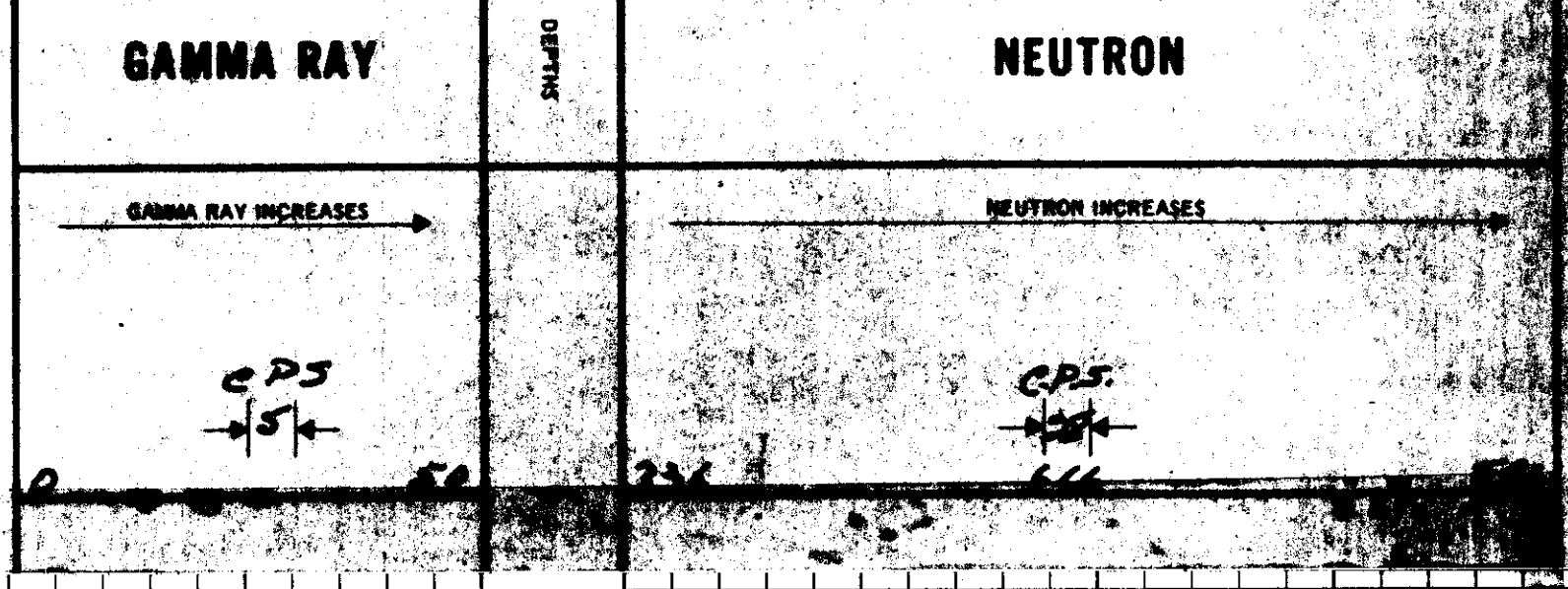
Run No.	<b>ONE</b>
Date	<b>26 AUG 70</b>
First Reading	<b>270</b>
Last Reading	<b>000</b>
Footage Logged	<b>290</b>
Depth Reached	<b>291</b>
Depth Driller	
Casing Note	
Casing Driller	
Fluid Type	<b>WATER</b>
Liquid Level	<b>47 FT.</b>
Min. Diam.	
Operating Time	<b>3 HRS</b>
Truck No.	<b>20</b>

K-LOGS 206310-1

EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	<b>ONE</b>	RUN NO.	<b>ONE</b>
TOOL MODEL NO.		LOG TYPE	<b>NEUTRON/NEUTRON</b>
DIAMETER	<b>1 1/2</b>	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	<b>1 1/2</b>
TYPE	<b>GEIGER</b>	DETECTOR MODEL NO.	
LENGTH	<b>18 INCH</b>	TYPE	<b>PROPORTIONAL</b>
DISTANCE TO N. SOURCE	<b>6.25 FT.</b>	LENGTH	<b>6 INCH</b>
		SOURCE MODEL NO.	<b>MRC-N-53-V</b>
		SERIAL NO.	<b>571</b>
		SPACING	<b>18 INCH</b>
		TYPE	<b>AMBI</b>
		STRENGTH	<b>6.94 x 10<sup>4</sup> N/S</b>

LOGGING DATA											
GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	DEPTHS	SPEED	T.C.	SENS	ZERO	AMPL. G.R. UNITS	T.C.	SENS	ZERO	AMPL. N. UNITS	T.C.
	FROM	TO	FT/HR	SEC.	SETTINGS	DIV. L OR R	PER LOG DIV.	SEC.	SETTINGS	DIV. L OR R	PER LOG DIV.
1	000	46	11	4	25	0	2 CPS	4	4	12L	10
	46	290	11	4	25	0	2 CPS	4	4	2L	10
<b>REPEAT SECTION (EXPANDED NEUTRON)</b>											
				4	25	0	5 CPS	4	10	50L	

REMARKS



# ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

K-56000-7031A-1

FILE NO. \_\_\_\_\_  
 COMPANY **FORDING COAL COMPANY**  
 WELL **RH 100**  
 TWP **GREEN HILLS**  
 RGE **FORDING RIVER**  
 M **BRITISH COLUMBIA**

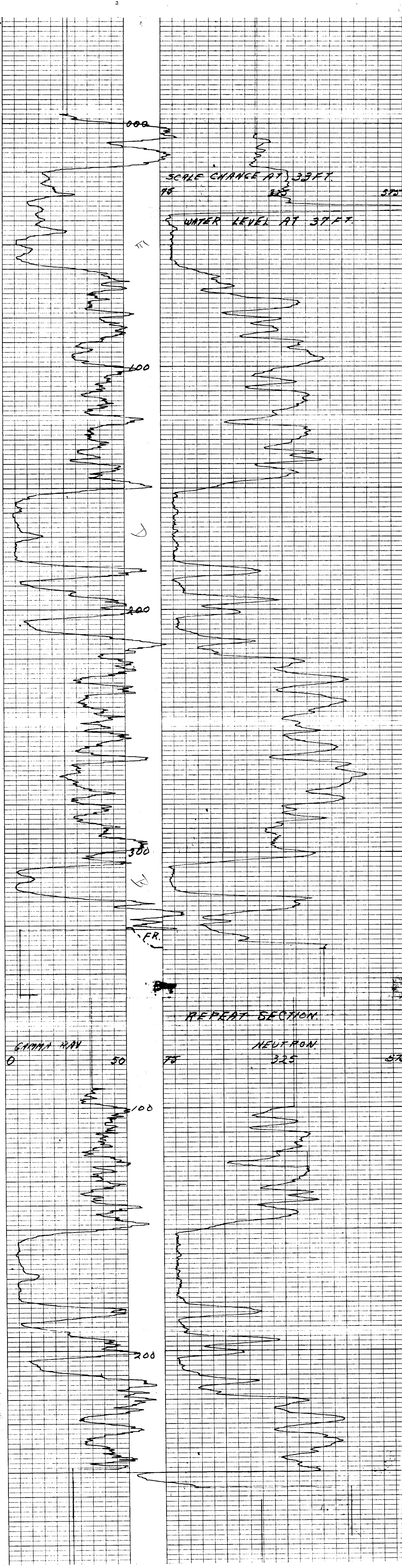
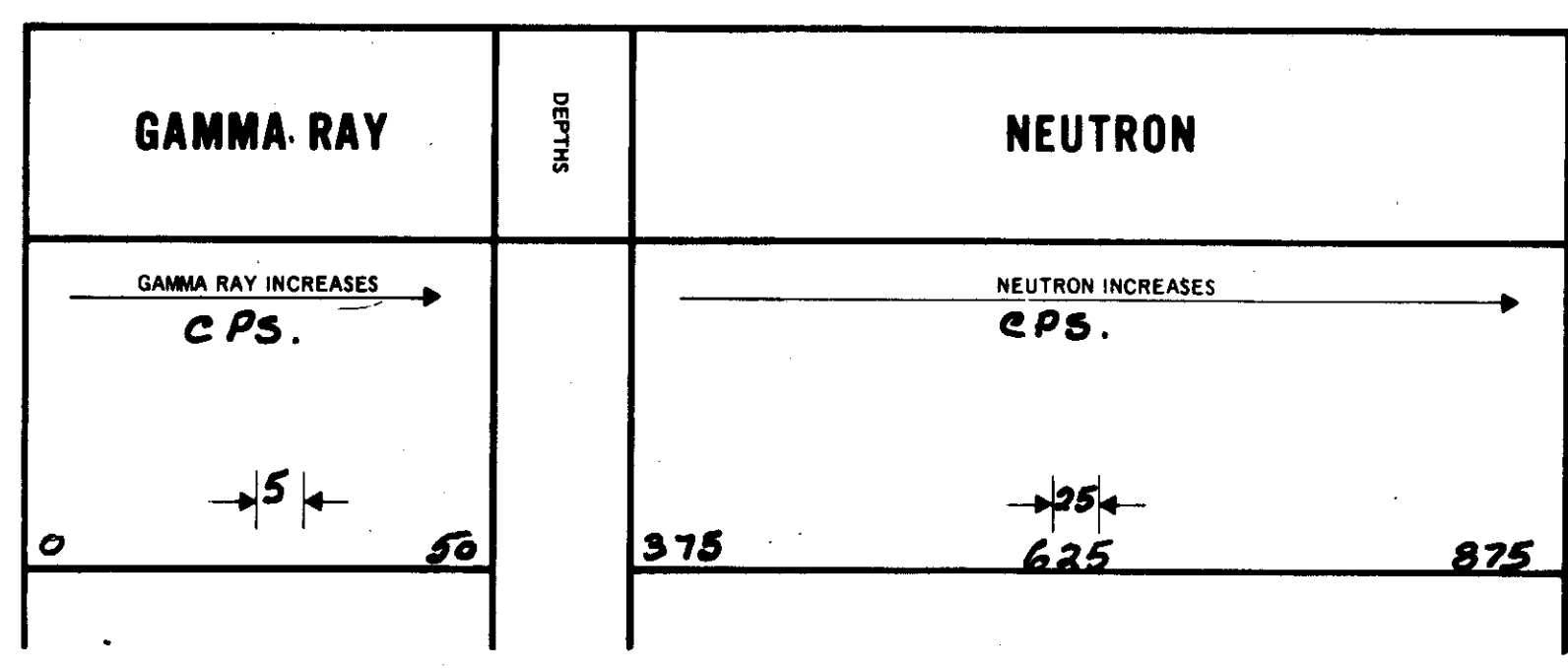
Permanent Datum \_\_\_\_\_ Elev. \_\_\_\_\_ K.B. \_\_\_\_\_  
 Log Measured from **GROUND LEVEL** Ft. Above Perm. Datum \_\_\_\_\_ D.F. \_\_\_\_\_  
 Well Depths Measured from **GROUND LEVEL** G.L. \_\_\_\_\_

Run No. **ONE**  
 Date **19 MAR 70**  
 First Reading **339**  
 Last Reading **000**  
 Footage Logged **389**  
 Depth Reached **340**  
 Casing Hole \_\_\_\_\_  
 Casing Depth \_\_\_\_\_  
 Fluid Type **WATER**  
 Liquid Level **37 FT.**  
 Min. Diam. \_\_\_\_\_  
 Operating Time **2 HRS.**  
 Truck No. **10**  
 Recorded By **PETERSON** Witnessed By **BUTRECHUK**

EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	<b>ONE</b>	RUN NO.	<b>ONE</b>
TOOL MODEL NO.		LOG TYPE	<b>NEUTRON/NEUTRON</b>
DIAMETER	<b>1 1/2</b>	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	<b>1 1/2</b>
TYPE	<b>GEIGER</b>	DETECTOR MODEL NO.	
LENGTH	<b>18 INCH</b>	TYPE	<b>PROPORTIONAL</b>
DISTANCE TO N. SOURCE	<b>8.55 FT</b>	LENGTH	<b>6 INCH</b>
		SOURCE MODEL NO.	<b>MRC-N-SS-W</b>
		SERIAL NO.	<b>598</b>
GENERAL		SPACING	<b>19 INCHES</b>
HOIST TRUCK NO.	<b>10</b>	TYPE	<b>AmBe</b>
INSTRUMENT TRUCK NO.		STRENGTH	<b>6.94 x 10<sup>6</sup> N/S</b>
TOOL SERIAL NO.	<b>CQ270466</b>		

LOGGING DATA											
RUN NO.	GENERAL DEPTHS		SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	GAMMA RAY		NEUTRON		API N. UNITS PER LOG DIV.	
	FROM	TO				ZERO DIV. L OR R	API G R UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS		ZERO DIV. L OR R
1	000	023	12	4	25	0	5 CPS.	4	5	154	25 CPS.
	023	339	13	4	25	0	5 CPS.	4	5	34	25 CPS.
2	100	250	13	4	25	0	5 CPS.	4	5	34	25 CPS.





K-LOGGING 70(5)A-1

# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO. COMPANY **FORBING COAL CO.**

WELL **RH 102**

LOCATION **TURN-BULL MOUNTAIN, CLODE CR.**

FIELD **FORBING**

PROVINCE **BRITISH COLUMBIA**

Permanent Datum **GROUND LEVEL** Elev. **6104** K.B. \_\_\_\_\_  
 Log Measured from \_\_\_\_\_ Ft. Above Perm. Datum D.F. \_\_\_\_\_  
 Well Depths Measured from **GROUND LEVEL** G.L. \_\_\_\_\_

Run No. **ONE**

Date **11 FEB 1961**

First Reading **511**

Last Reading **040**

Footage Logged **511**

Depth Reached **514**

Casing Rate \_\_\_\_\_

Casing Driller \_\_\_\_\_

Fluid Type **WATER**

Liquid Level **172**

Min. Diam. \_\_\_\_\_

Operating Time **2**

Truck No. **10**

Recorded By **PETTERSON** Witnessed By **PEARSON**

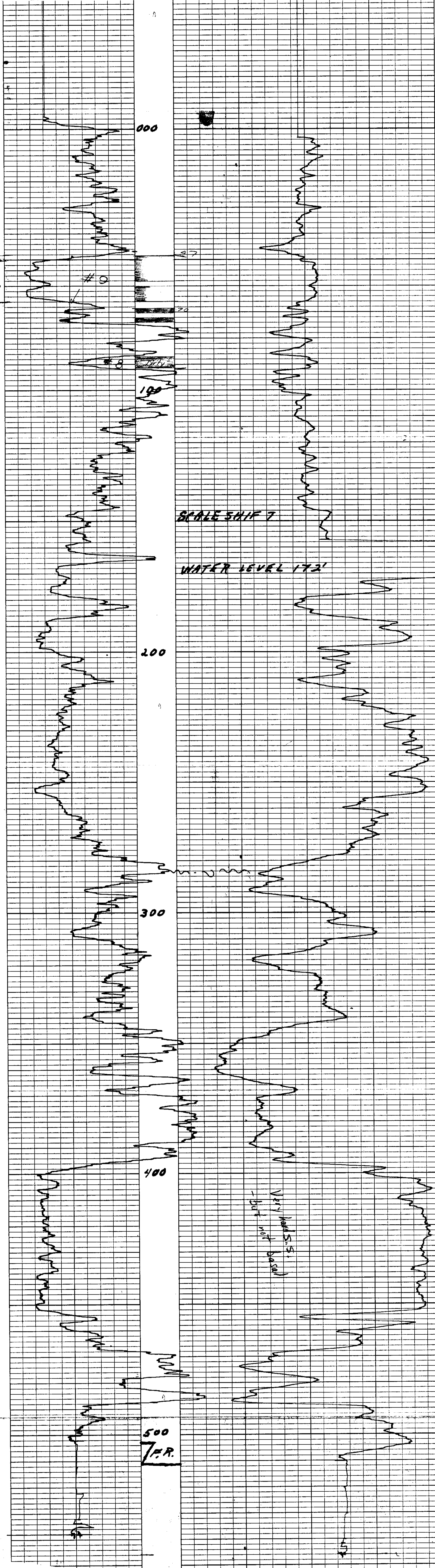
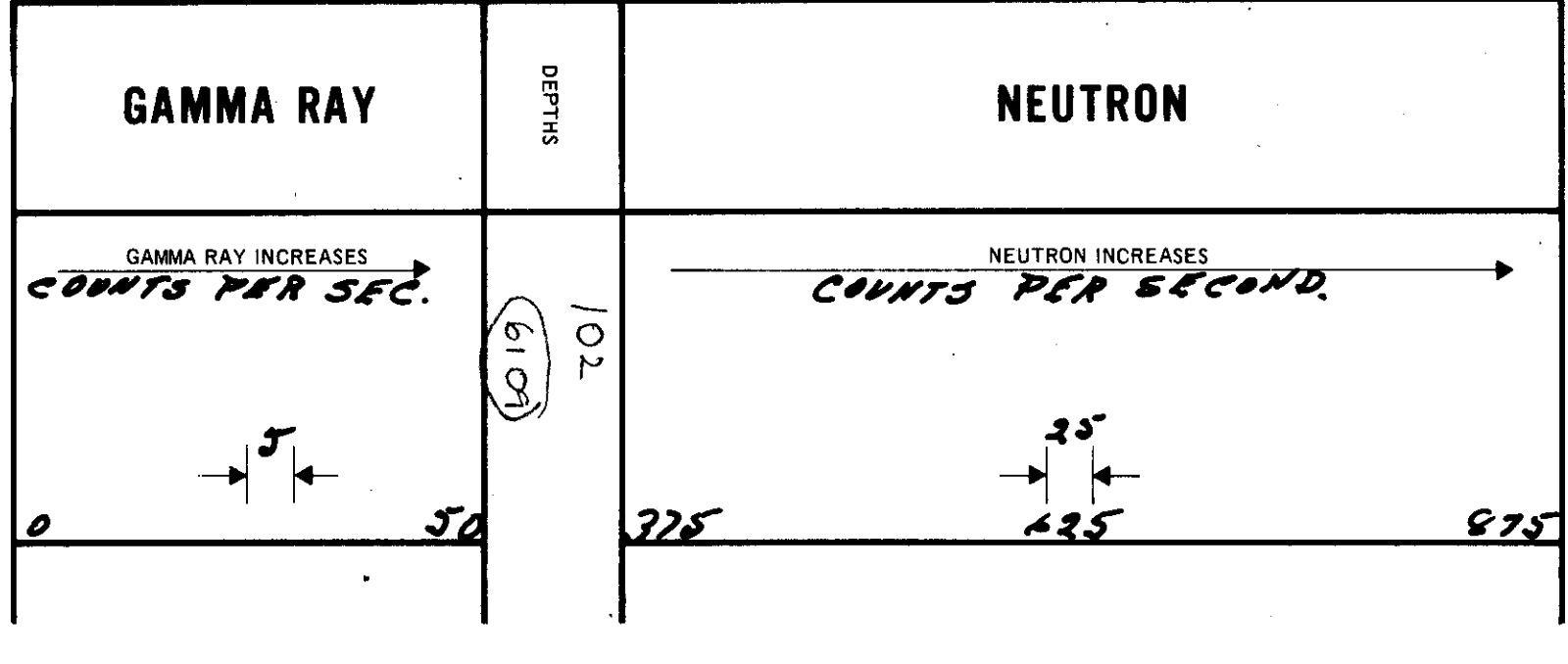
EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	<b>ONE</b>	RUN NO.	<b>ONE</b>
TOOL MODEL NO.		LOG TYPE	<b>NEUTRON/NEUTRON</b>
DIAMETER	<b>1 1/2"</b>	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	<b>1 1/2"</b>
TYPE	<b>GIEGER</b>	DETECTOR MODEL NO.	
LENGTH	<b>18"</b>	TYPE	<b>PROPORTIONAL</b>
DISTANCE TO N. SOURCE	<b>8.55'</b>	LENGTH	<b>6"</b>
		SOURCE MODEL NO.	<b>NRC-N-55-W</b>
		SERIAL NO.	<b>528</b>
HOIST TRUCK NO.	<b>10</b>	SPACING	<b>19"</b>
INSTRUMENT TRUCK NO.		TYPE	<b>RA 05</b>
TOOL SERIAL NO.	<b>CON274965</b>	STRENGTH	<b>6.24 x 10<sup>6</sup> N/RC.</b>

LOGGING DATA

RUN NO.	DEPTHS		SPEED FT./MIN.	T.C. SEC.	SENS. SETTINGS		ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.		T.C. SEC.	SENS. SETTINGS		ZERO DIV. L OR R	API N. UNITS PER LOG DIV.	
	FROM	TO			GAMMA RAY	NEUTRON		GAMMA RAY	NEUTRON						
1	300	158	12	3	25	0	5 CPS.	3	5	154	25 CPS.				
	158	511	12	3	25	0	5 CPS.	3	5	74	25 CPS.				

REMARKS **NOTE SCALE SHIFT AT 158'**



Tumbull Mountain

RH 119 to RH 134

MILANS - 125' 130 to 133

NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

COMPANY: **FOODING COAL CO.**

WELL: **RH 119 119**

LOCATION: **TUMBUILL MOUNTAIN**

FIELD: **FORBINE**

PROVINCE: **BRITISH COLUMBIA**

Permanent Datum: **GRAND LEVEL** Elev. Above Perm. Datum: **D.F.**  
 Log Measured from: **GRAND LEVEL** Well Depth Measured from: **GRAND LEVEL** O.L.

Run No. **ONE**  
 Date **10 FEB/70**

First Reading **547**  
 Last Reading **888**

Footage Logged **547**  
 Depth Reached **547**

Depth Driller  
 Casing Driller  
 Fluid Type **WATER**

Liquid Level **68 FT**  
 Min. Depth

Operating Time **3 HRS.**

Track No. **10**

Recorded By **BANKS** Witnessed By **PEARSON**

**312**

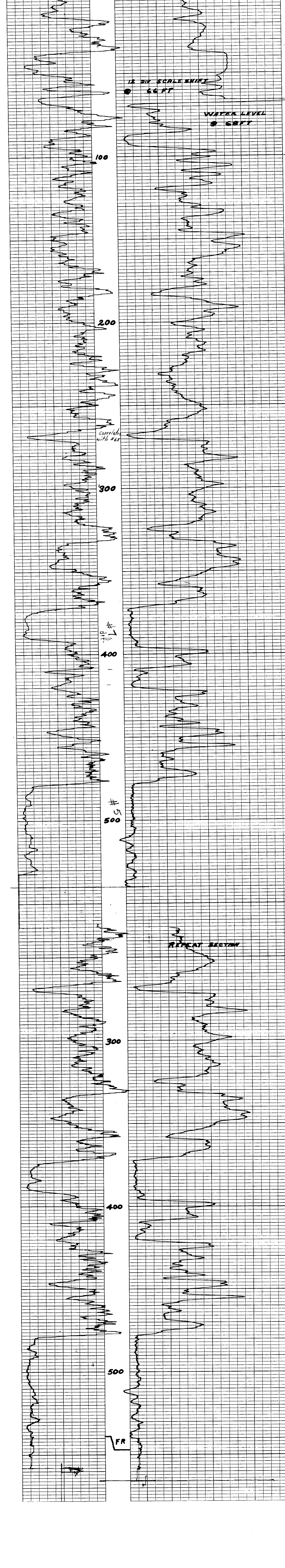
EQUIPMENT DATA

GAMMA RAY				NEUTRON			
RUN NO.	<b>ONE</b>			RUN NO.	<b>ONE</b>		
TOOL MODEL NO.	<b>1 1/2"</b>			LOG TYPE	<b>NEUTRON/NEOGRON</b>		
DIAMETER	<b>1 1/2"</b>			TOOL MODEL NO.	<b>1 1/2"</b>		
DETECTOR MODEL NO.	<b>GIEGER</b>			DIAMETER	<b>1 1/2"</b>		
TYPE	<b>18"</b>			DETECTOR MODEL NO.	<b>PROPORTIONAL</b>		
LENGTH	<b>18"</b>			TYPE	<b>6"</b>		
DISTANCE TO N. SOURCE	<b>2:55'</b>			LENGTH	<b>18"</b>		
				SOURCE MODEL NO.	<b>ARC-N-33-W</b>		
				SERIAL NO.	<b>588</b>		
				SPACING	<b>19"</b>		
				TYPE	<b>ARC-N-33-W</b>		
				STRENGTH	<b>6"PVX10" N/SEC.</b>		

LOGGING DATA

GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	DEPTHS		SPEED	T.C.	SENS	ZERO	API G.R. UNITS	T.C.	SENS	ZERO	API N. UNITS
1	FROM	TO	FT/MIN	SEC.	SETTINGS	DIV. L. OR R.	PER LOG DIV.	SEC.	SETTINGS	DIV. L. OR R.	PER LOG DIV.
	666	547	12	3	25	0	5 CPS	3	5	15L	25CPS
	666	547	12	3	25	0	5 CPS	3	5	3L	25CPS

REMARKS: **NOTE - DEEPEST READING APPEARS ON REPEAT SECTION**



K-Freemans 76(3)-1

# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO. COMPANY **FORDING COAL COMPANY LTD**

WELL **RH 120**

LOCATION **TUBBULL MOUNTAIN**

FIELD **FORDING**

PROVINCE **BRITISH COLUMBIA**

Permanent Datum **GAMMA LEVEL** Elev. \_\_\_\_\_ K.B. \_\_\_\_\_  
 Log Measured from \_\_\_\_\_ Ft. Above Perm. Datum D.F. \_\_\_\_\_  
 Well Depths Measured from **GAMMA LEVEL** G.L. \_\_\_\_\_

Run No. **ONE**

Date **9 FEB 70**

Last Reading **485**

Footage Logged **0**

Depth Reached **485**

Depth Driller **485**

Casing Driller

Fluid Type **WATER**

Liquid Level **26 FT**

Min. Diam. \_\_\_\_\_

Operating Time \_\_\_\_\_

Truck No. **10**

Recorded By **BAWES**

Witnessed By **PENNSON**

# 312

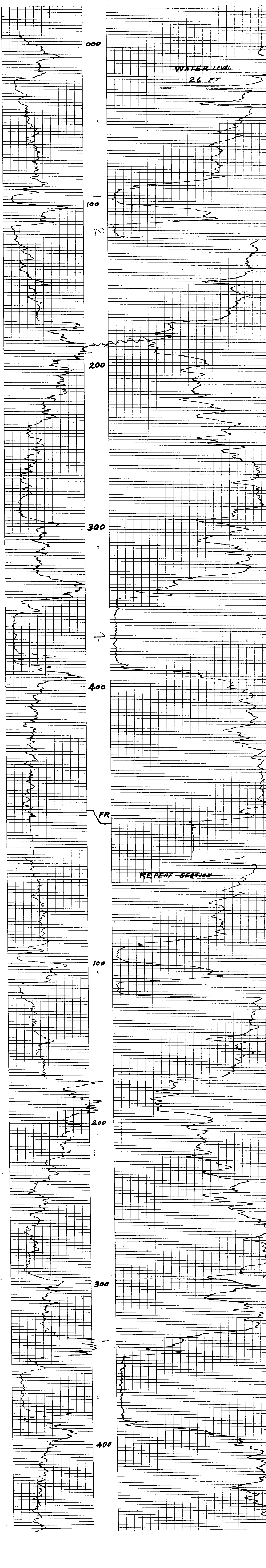
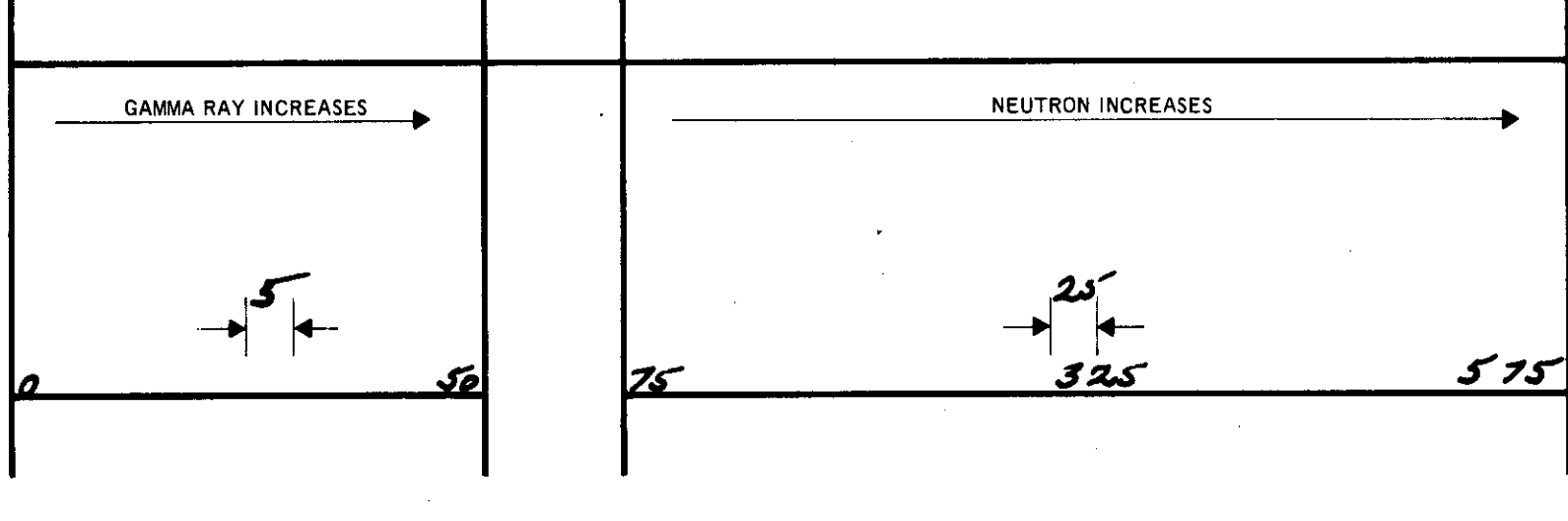
### EQUIPMENT DATA

GAMMA RAY				NEUTRON			
RUN NO.	<b>ONE</b>			RUN NO.	<b>ONE</b>		
TOOL MODEL NO.	<b>1 11/16"</b>			LOG TYPE	<b>NEUTRON/NEUTRON</b>		
DIAMETER	<b>1 11/16"</b>			TOOL MODEL NO.	<b>1 11/16"</b>		
DETECTOR MODEL NO.	<b>RIEGER</b>			DIAMETER	<b>1 11/16"</b>		
TYPE	<b>18"</b>			DETECTOR MODEL NO.	<b>PROPORTIONAL</b>		
LENGTH	<b>8.58 FT</b>			TYPE	<b>6 INCH</b>		
DISTANCE TO N. SOURCE				LENGTH	<b>MRC-N-55-W</b>		
GENERAL				SOURCE MODEL NO.	<b>598</b>		
HOIST TRUCK NO.	<b>10</b>			SERIAL NO.	<b>19 INCH</b>		
INSTRUMENT TRUCK NO.				SPACING	<b>AMB 26</b>		
TOOL SERIAL NO.	<b>CGN-2704465</b>			STRENGTH	<b>6.94 x 10<sup>6</sup> N/SEC</b>		

### LOGGING DATA

RUN NO.	DEPTHS		SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	GAMMA RAY		NEUTRON		API N UNITS	
	FROM	TO				ZERO DIV. L OR R	PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	PER LOG DIV.
<b>1</b>	<b>0</b>	<b>485</b>	<b>12</b>	<b>3</b>	<b>25</b>	<b>0</b>	<b>5 CPS</b>	<b>3</b>	<b>5</b>	<b>36</b>	<b>25 CPS</b>
<b>REPEAT RUN AS ABOVE</b>											

REMARKS



# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

COMPANY **FOODS COAL COMPANY LTD.**

WELL **RH 121**

LOCATION **TURNBULL MOUNTAIN**

FIELD **FORBES**

PROVINCE **BRITISH COLUMBIA**

Log Measured from **SEALED LEAD LEVEL** Ft. Above Perm. Datum

Well Depths Measured from **SEALED LEAD LEVEL** G.L.

Run No. **ONE**

Date **10 FEB 70**

First Reading **546**

Last Reading **0**

Footage Logged **546**

Depth Reached **547**

Casing Role

Casing Driver

Fluid Type **WATER**

Liquid Level

Min. Diam.

Operating Time **3 HRS**

Truck No. **10**

Recorded By **PETERSON**

Witnessed By **PETERSON**

K-forecast 70131A-1

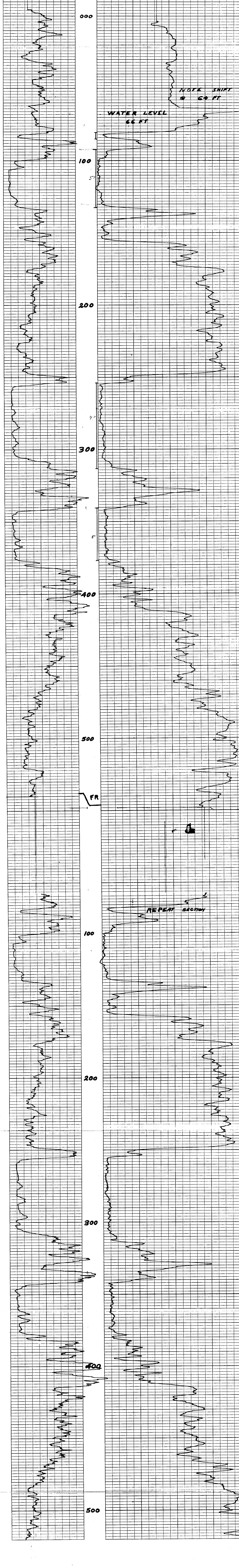
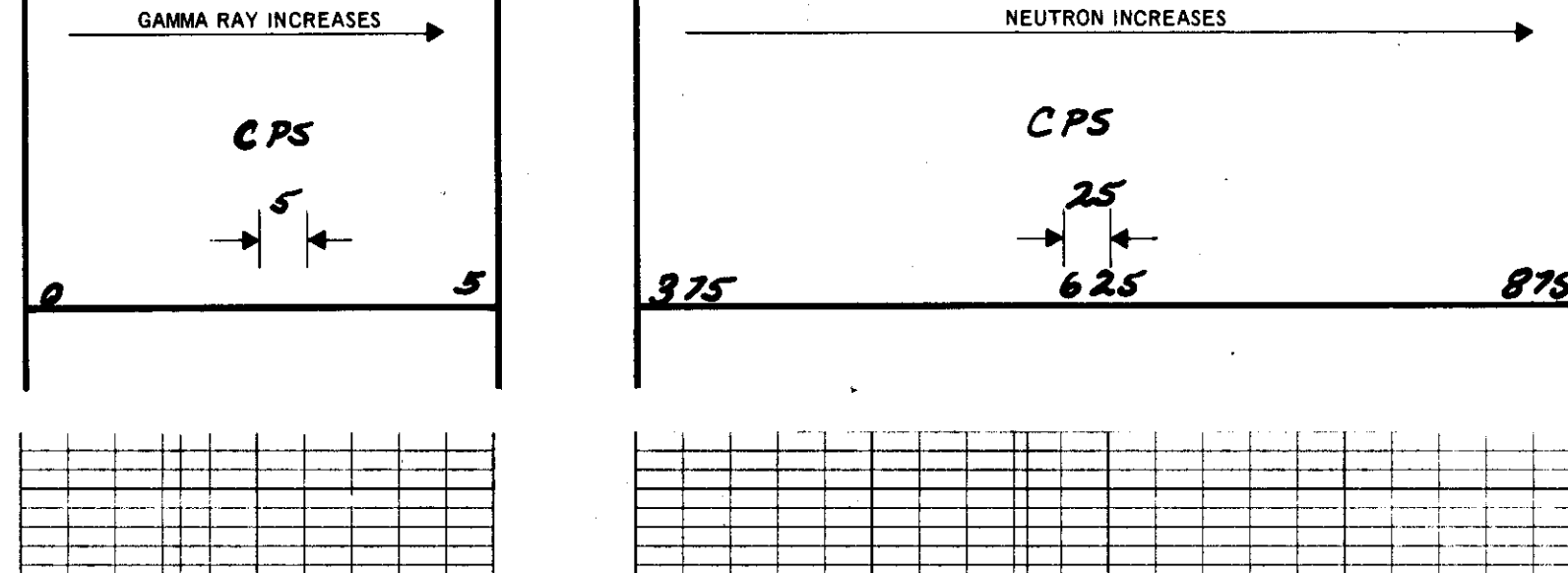
### EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/4	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	1 1/4
TYPE	GIEGAR	DETECTOR MODEL NO.	
LENGTH	18 INCH	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	8.55 FT	LENGTH	6 INCH
		SOURCE MODEL NO.	MRC-N-55-W
		SERIAL NO.	598
		SPACING	19 INCH
		TYPE	AmBn
		STRENGTH	6.94 x 10 <sup>6</sup> N/S

### LOGGING DATA

RUN NO.	DEPTHS		SPEED FT/MIN	T.C. SEC.	GAMMA RAY			NEUTRON						
	FROM	TO			SENS SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.			
1	0	64	12	3	25	0	5	CPS	3	5	15	L	25	CPS
	64	546	12	3	25	0	5	CPS	3	5	3	L	25	CPS

REMARKS **NOTE 12 DIVISION SHIFT TO LEFT @ 64 FT**



# ROKE

GAMMA RAY NEUTRON LOG

K-Spears 265181

OIL ENTERPRISES LTD. CALGARY, ALBERTA

COMPANY **ESKINS COAL COMPANY LTD**

WELL **RH 122**

LOCATION **TURNBULL MOUNTAIN**

FIELD **FORBING**

PROVINCE **BRITISH COLUMBIA**

Permit No. **Gamma Level** Elev. **Fl. Above Perm. Datum**

Log Measured from **Gamma Level** D.F. **GL**

Well Depths Measured from **Gamma Level** G.L.

Run No. **ONE**

Date **9 FEB 70**

Last Reading **0**

Footage Logged **465**

Depth Reached **466**

Depth Driller **WRIGER**

Casing Driller **57 FT**

Fluid Type

Liquid Level

Min. Diam.

Operating Time **3 HRS**

Track No. **10**

Recorded By **Bowles**

Witnessed By **Pearson**

**312**

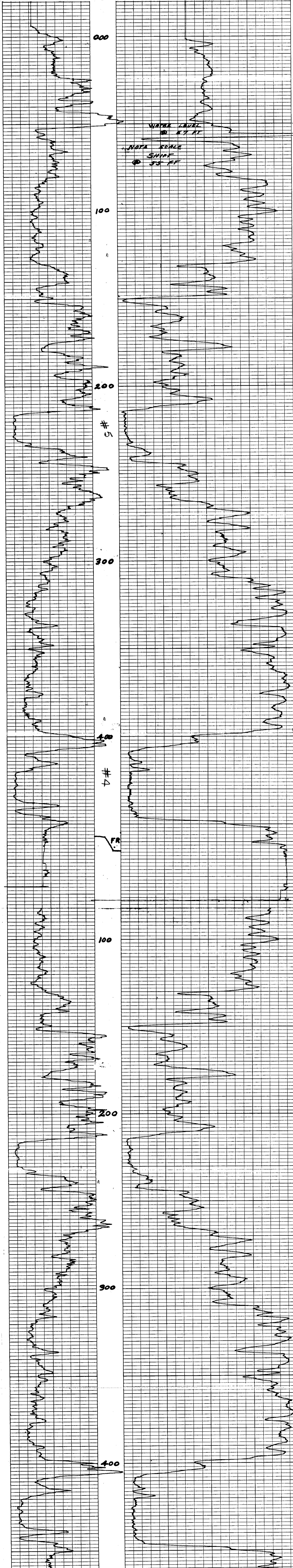
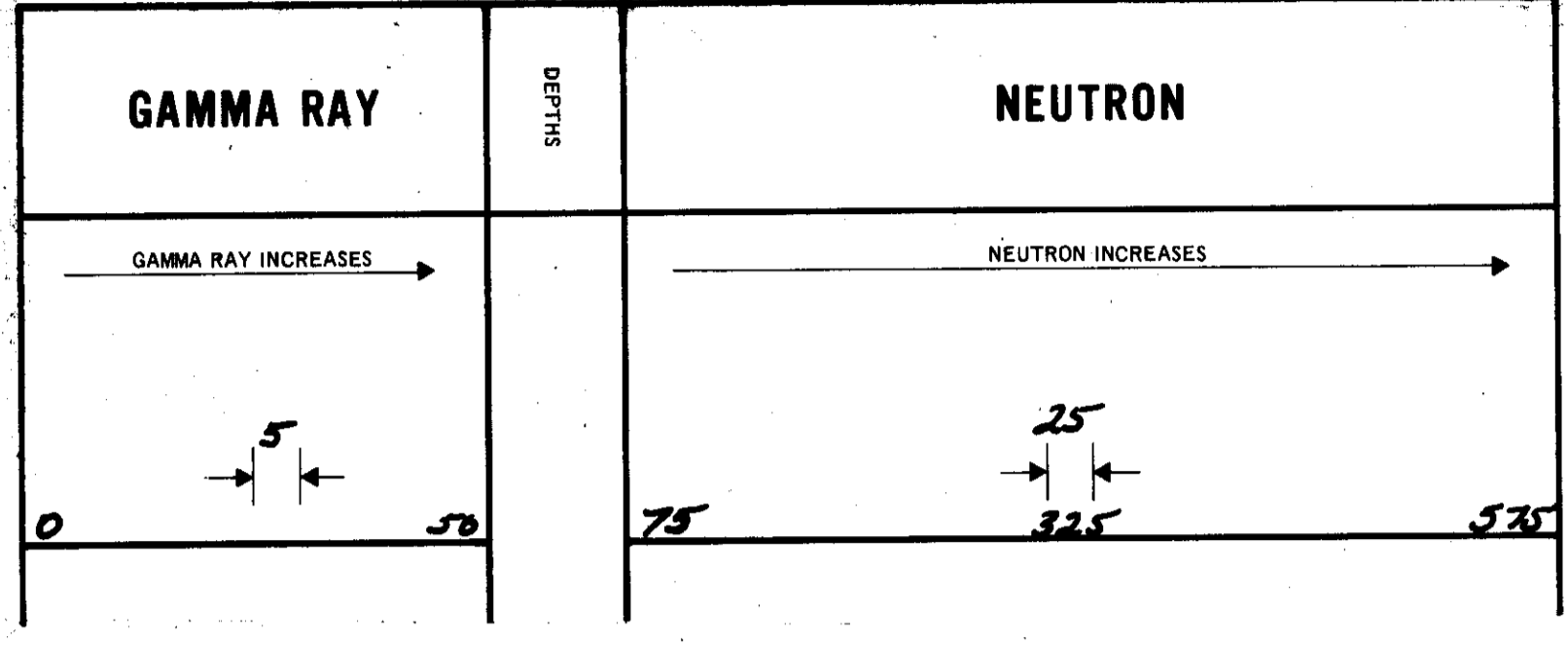
### EQUIPMENT DATA

GAMMA RAY				NEUTRON			
RUN NO.	<b>ONE</b>			RUN NO.	<b>ONE</b>		
TOOL MODEL NO.	<b>1 1/16"</b>			LOG TYPE	<b>NEUTRON/NEUTRON</b>		
DIAMETER	<b>1 1/16"</b>			TOOL MODEL NO.	<b>1 1/16"</b>		
DETECTOR MODEL NO.	<b>GIEGER</b>			DETECTOR MODEL NO.	<b>PROPORTIONAL</b>		
TYPE	<b>18 INCH</b>			TYPE	<b>6 INCH</b>		
LENGTH	<b>8.55 FT</b>			LENGTH	<b>MRC-N-55-W</b>		
DISTANCE TO N. SOURCE				SOURCE MODEL NO.	<b>598</b>		
GENERAL				SERIAL NO.	<b>19 INCH</b>		
HOIST TRUCK NO.	<b>10</b>			SPACING	<b>Am B<sub>2</sub></b>		
INSTRUMENT TRUCK NO.				TYPE	<b>6.94 x 10<sup>6</sup> N/S</b>		
TOOL SERIAL NO.	<b>CGN 22044 65</b>			STRENGTH			

### LOGGING DATA

RUN NO.	GENERAL		GAMMA RAY				NEUTRON				
	DEPTHS FROM	TO	SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API GR. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	0	55	12	3	25	0	5 CPS	3	5	15 L	25 CPS
	55	465	12	3	25	0	5 CPS	3	5	15 L	25 CPS
	<b>REPEAT SECTION</b>		<b>AS ABOVE</b>								

REMARKS



# ROKE

GAMMA RAY NEUTRON LOG

K-FOOTAGE 7631A-1

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO. COMPANY **FORBES OIL CO. LTD.**

WELL **N 122**

LOCATION **TERRACE MOUNTAIN**

FIELD **PONDITE**

PROVINCE **BRITISH COLUMBIA**

Permanent Datum **ARMAD LEVEL** ELEV. \_\_\_\_\_

Log Measured from **ARMAD LEVEL** D.F. \_\_\_\_\_

Well Depth Measured from \_\_\_\_\_ G.L. \_\_\_\_\_

Run No. **ONE**

Date **10 FEB 70**

First Reading **511**

Last Reading **0**

Footage Logged **511**

Depth Reached **512**

Depth Driller **530**

Casing Roker **WATER**

Fluid Type **000"**

Liquid Level **43"**

Min. Diam. \_\_\_\_\_

Operating Time **2:15**

Truck No. **0**

Recorded By **SMYTS**

Witnessed By **PARSON**

312

### EQUIPMENT DATA

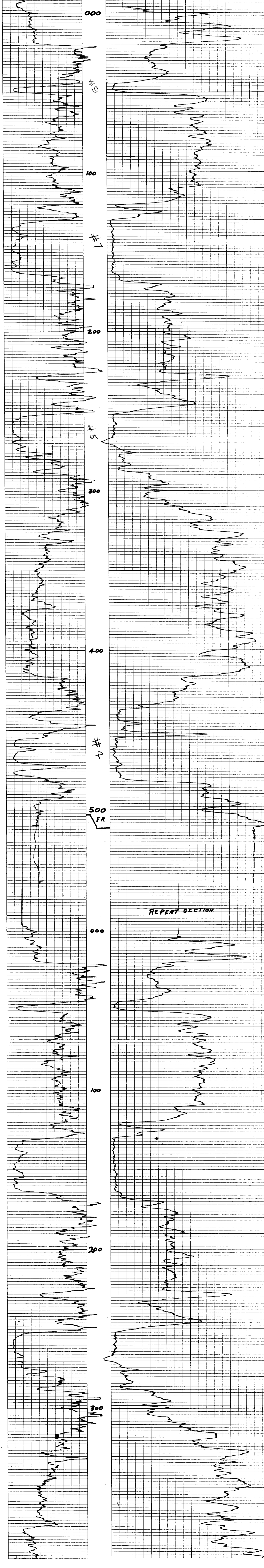
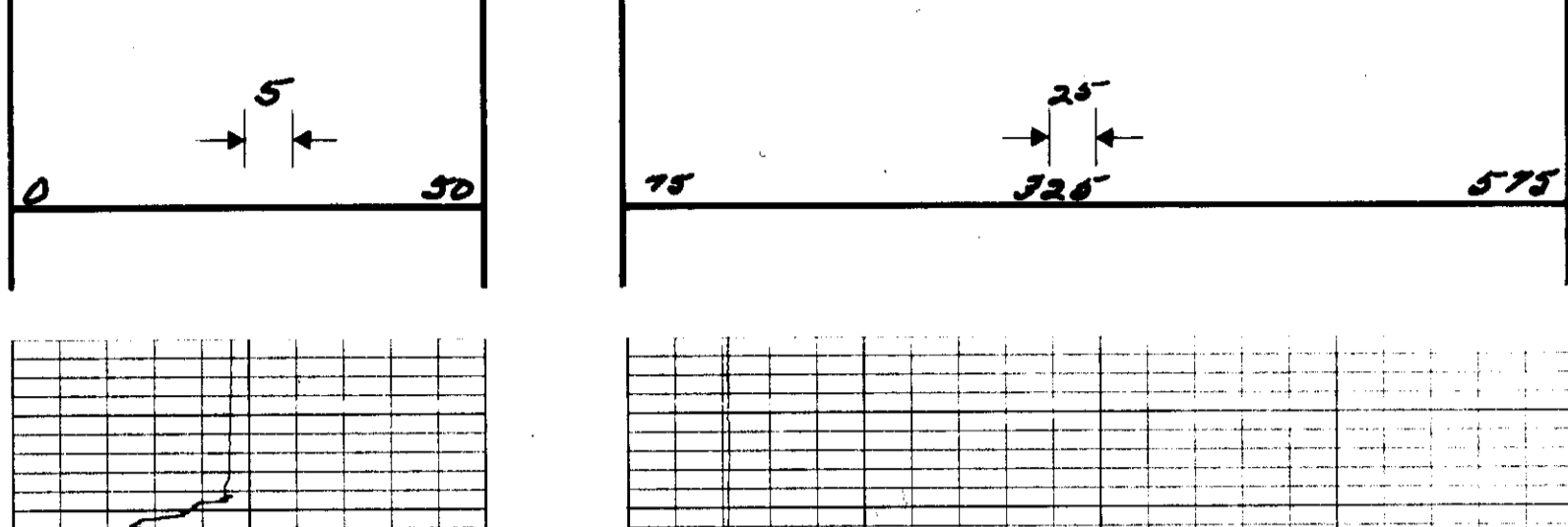
GAMMA RAY				NEUTRON			
RUN NO.	<b>ONE</b>			RUN NO.	<b>ONE</b>		
TOOL MODEL NO.	<b>1 3/4</b>			LOG TYPE	<b>NEUTRON/NEUTRON</b>		
DIAMETER	<b>1 3/4</b>			TOOL MODEL NO.	<b>1 3/4"</b>		
DETECTOR MODEL NO.	<b>GIEBER</b>			DETECTOR MODEL NO.	<b>PROPORTIONAL</b>		
TYPE	<b>12"</b>			TYPE	<b>6"</b>		
LENGTH	<b>9.55'</b>			LENGTH	<b>ARC-N-55-W</b>		
DISTANCE TO N. SOURCE				SOURCE MODEL NO.	<b>571</b>		
GENERAL				SERIAL NO.	<b>19"</b>		
HOIST TRUCK NO.	<b>10</b>			SPACING	<b>10 3/4</b>		
INSTRUMENT TRUCK NO.				STRENGTH	<b>60N x 10 N/SEC.</b>		
TOOL SERIAL NO.	<b>CR4704A65</b>						

### LOGGING DATA

GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	FROM	TO	SPEED FT/MIN	T.C. SEC	SENS SETTINGS	ZERO DIV L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC	SENS SETTINGS	ZERO DIV L OR R	API N. UNITS PER LOG DIV.
<b>1</b>	<b>000</b>	<b>511</b>	<b>12</b>	<b>3</b>	<b>25</b>	<b>0</b>	<b>5 CPS</b>	<b>3</b>	<b>5</b>	<b>34</b>	<b>25 CPS</b>

REPEAT SECTION AS ABOVE.

REMARKS



# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

COMPANY **FORBING COAL CO. LTD.**

WELL **133**

LOCATION **TURN BULL MTN.**

FIELD **FORBING RIVER**

PROVINCE **BRITISH COLUMBIA.**

Permit Data **GRAND LEVEL.** Elev. **1187-N-33-W.**

Log Measured from **GROUND LEVEL.** Ft. Above Perm. Datum **0 F.**

Well Depths Measured from **GROUND LEVEL.** G.L.

Run No.	<b>ONE</b>
Date	<b>3/3/70</b>
First Reading	<b>458</b>
Last Reading	<b>458</b>
Footage Logged	<b>458</b>
Depth Reached	<b>458</b>
Depth Driller	<b>458</b>
Casing Hole	
Casing Driller	
Fluid Type	<b>WATER</b>
Liquid Level	<b>0 FT.</b>
Min. Diam.	
Operating Time	<b>10</b>
Truck No.	
Recorded By	
Witnessed By	

**312**

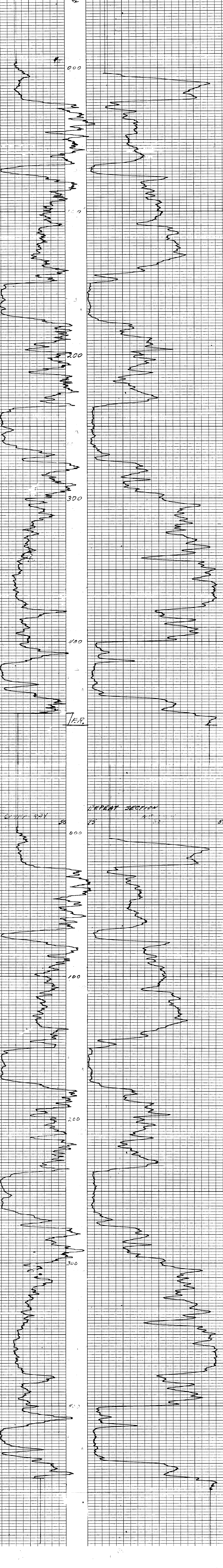
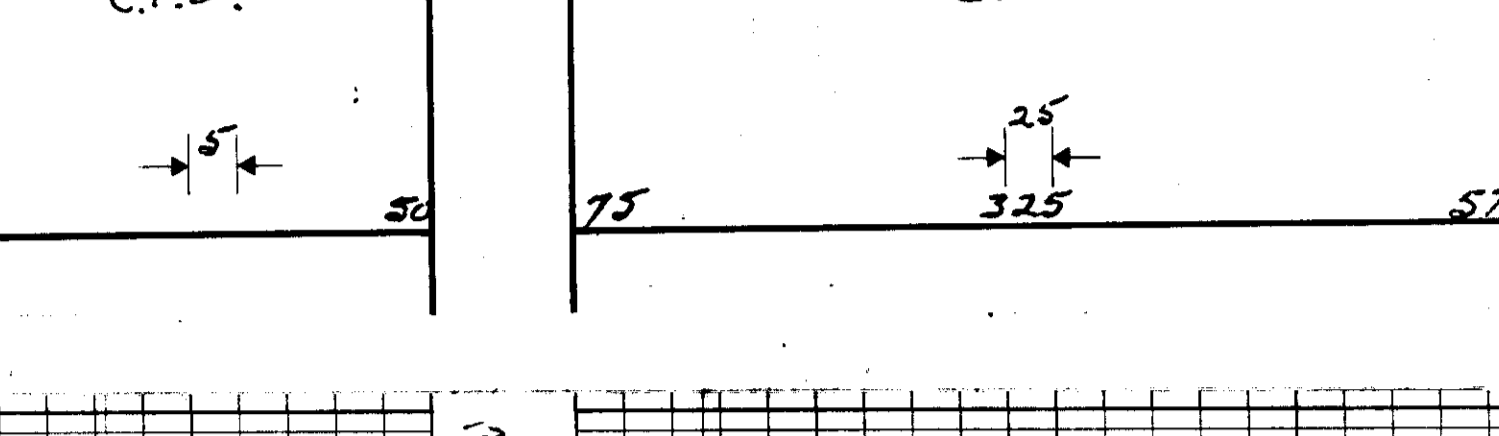
### EQUIPMENT DATA

GAMMA RAY				NEUTRON			
RUN NO.	<b>ONE</b>			RUN NO.	<b>ONE</b>		
TOOL MODEL NO.	<b>1 1/2 INCHES</b>			LOG TYPE	<b>NEUTRON/NEUTRON</b>		
DETECTOR MODEL NO.	<b>GEIGER</b>			TOOL MODEL NO.	<b>1 1/2 INCHES</b>		
TYPE	<b>18 INCHES</b>			DIAMETER	<b>PROPORTIONAL</b>		
LENGTH	<b>8.55 FEET.</b>			DETECTOR MODEL NO.	<b>6 INCH S.</b>		
DISTANCE TO N. SOURCE				TYPE	<b>1787-N-33-W.</b>		
GENERAL				LENGTH	<b>573</b>		
HOIST TRUCK NO.	<b>10</b>			SOURCE MODEL NO.	<b>19 INCHES.</b>		
INSTRUMENT TRUCK NO.				SERIAL NO.	<b>PA 85</b>		
TOOL SERIAL NO.	<b>CGN274465</b>			SPACING	<b>6.24 x 10<sup>6</sup> N/S.</b>		
				TYPE			
				STRENGTH			

### LOGGING DATA

RUN NO.	DEPTHS		SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	GAMMA RAY		API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	NEUTRON		API N. UNITS PER LOG DIV.
	FROM	TO				ZERO DIV	L OR R				ZERO DIV	L OR R	
1	000	458	13	3	25	0	5 CPS.	3	5	3L	25 CPS.		
2	000	458	13	3	25	0	5 CPS.	3	5	3L	25 CPS.		

REMARKS



K-560015 703/A-1

# ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

FILE NO.	COMPANY	WELL	LOCATION	FIELD	PROVINCE
LSD	EDRINS COAL CO. LTD.	126	TURNBULL MTN.	FORBES RIVER	BRITISH COLUMBIA
SEC					
TWP					
RGE					
W					
M					
Permanent Datum	Log Measured from	Elev.	K. B.		
	GROUND LEVEL, Ft. Above Perm. Datum		D. F.		
	GROUND LEVEL,		CL.		
Well Depths Measured from					
Run No.	ONE				
Date	5 MAR 70				
Foot Reading	346				
Last Reading	000				
Footage Logged	346				
Depth Reached	347				
Depth Driller	310				
Casing Driller					
Casing Roke					
Fluid Type	WATER				
Liquid Level	010 FT.				
Min. Diam.					
Operating Time	10				
Truck No.					
Recorded By	PETERSON	Witnessed By	BYTENEHAY		

## 312

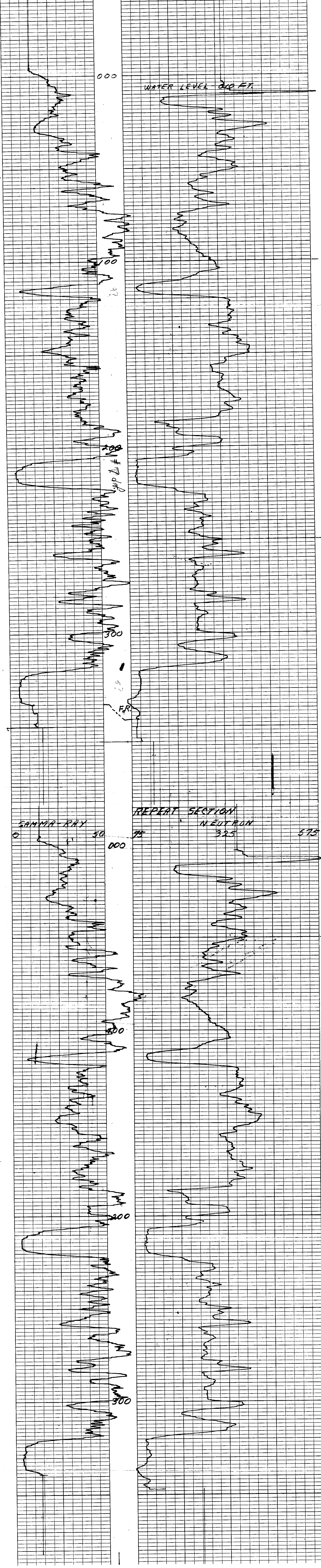
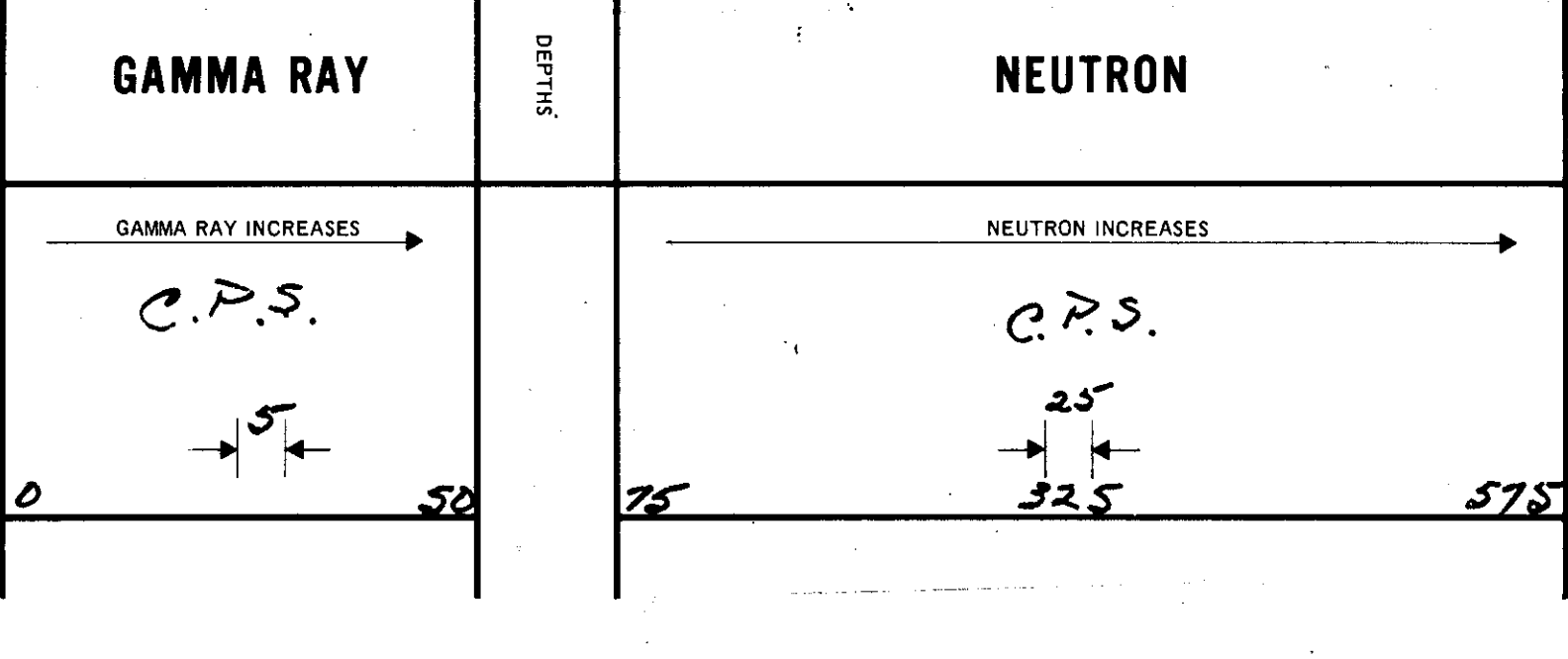
### EQUIPMENT DATA

GAMMA RAY				NEUTRON			
RUN NO.	ONE			RUN NO.	ONE		
TOOL MODEL NO.				LOG TYPE	NEUTRON/NEUTRON		
DIAMETER	1 1/2 INCHES			TOOL MODEL NO.			
DETECTOR MODEL NO.				DIAMETER	1 1/2 INCHES		
TYPE	GECOR.			DETECTOR MODEL NO.			
LENGTH	18 INCHES.			TYPE	PROPORTIONAL		
DISTANCE TO N. SOURCE	5.55 FEET			LENGTH	6 INCHES		
GENERAL				SOURCE MODEL NO.	MRE-N-38-W.		
HOIST TRUCK NO.	10			SERIAL NO.	578		
INSTRUMENT TRUCK NO.				SPACING	18 INCHES.		
TOOL SERIAL NO.	C6N270465			TYPE	27 BE.		
				STRENGTH	6.94 X 10 <sup>6</sup> N/3.		

### LOGGING DATA

RUN NO.	GENERAL DEPTHS		SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	GAMMA RAY		T.C. SEC.	SENS. SETTINGS	NEUTRON		API N. UNITS PER LOG DIV.
	FROM	TO				ZERO DIV.	L OR R			ZERO DIV.	L OR R	
1	000	346	13	3	2.5	0	5 CPS.	3	5	31	25 CPS.	
2	000	346	13	3	2.5	0	5 CPS.	3	5	31	25 CPS.	

REMARKS





# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

COMPANY: FORDING COAL CO. LTD.

WELL: RH 197

LOCATION: TORNBILL MOUNTAIN

FIELD: FORDING RIVER

PROVINCE: BRITISH COLUMBIA

PERMIT DATA: GRAND LAKEL. Elev. \_\_\_\_\_ K.B. \_\_\_\_\_  
Log Measured from \_\_\_\_\_ D.F. \_\_\_\_\_  
Well Depth Measured from \_\_\_\_\_ G.L. \_\_\_\_\_

Run No. 012

Date: 21 MAR 1960

First Reading: 428

Last Reading: 000

Footage Logged: 428

Depth Reached: 428

Casing Driller: \_\_\_\_\_

Fluid Type: WATER

Liquid Level: 150 FT.

Operating Time: 2 HRS.

Recorded By: BARKS

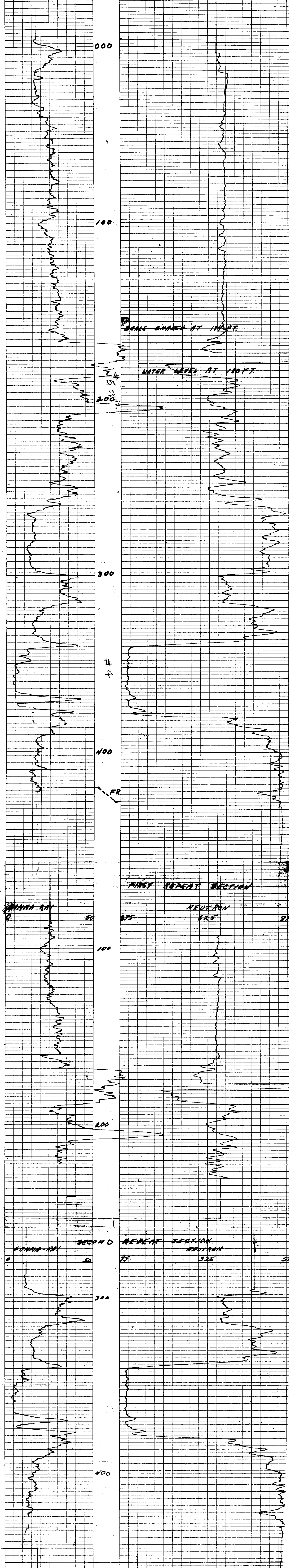
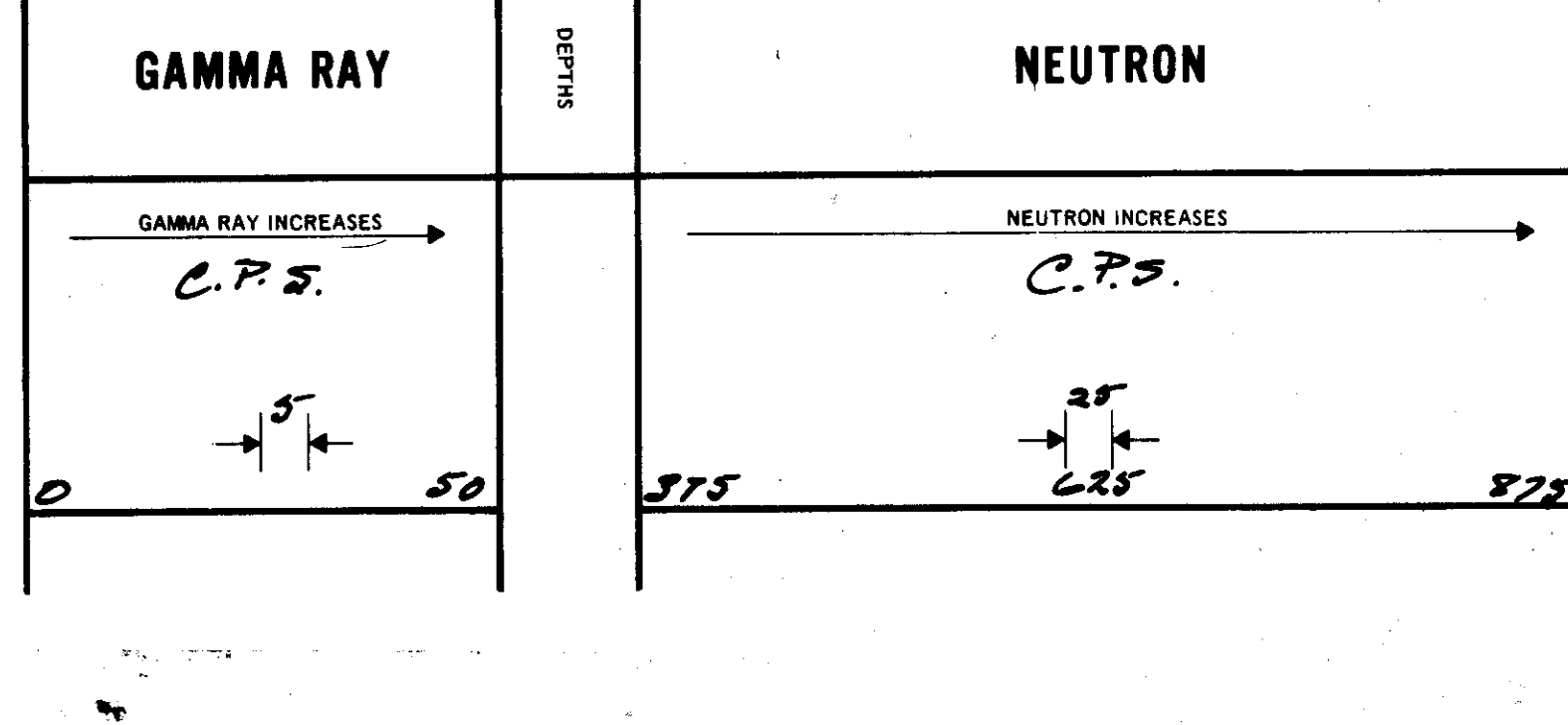
**312**

K-5 FORESIDE 70131A-1

EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/2	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	1 1/2
TYPE	GEIGER <sup>2</sup>	DETECTOR MODEL NO.	
LENGTH	18 INCH	TYPE	PROPORTIONAL
DISTANCE TO SOURCE	8.55 FT	LENGTH	6 INCH
		SOURCE MODEL NO.	MRC-N-SS-W
		SERIAL NO.	598
		SPACING	19 INCHES
HOIST TRUCK NO.	10	TYPE	AmBe
INSTRUMENT TRUCK NO.		STRENGTH	6.94 x 10 <sup>6</sup> N/S
TOOL SERIAL NO.	CEN27115		

LOGGING DATA											
RUN NO.	GENERAL		GAMMA RAY				NEUTRON				
	FROM	TO	SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	000	174	13	4	25	0	5 CPS.	4	5	15 L.	25 CPS.
	174	428	13	4	25	0	5 CPS.	4	5	3 L.	25 CPS.
	100	200	FIRST REPEAT - SCALE AS ABOVE								
	400	428	SECOND REPEAT - SCALE AS ABOVE								

REMARKS: NOTE: EXTRA REPEAT RUN AT WATER LEVEL.



# ROKE

GAMMA RAY NEUTRON LOG

R-LOGS 70(3)A-1

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO. COMPANY **FORDING COAL CO.**

WELL **R.H. 128**

LOCATION **TURN BULL MOUNTAIN**

FIELD **FORDING RIVER**

PROVINCE **BRITISH COLUMBIA**

Permitment Datum **GROUND LEVEL.** Elev. \_\_\_\_\_  
 Log Measured from **GROUND LEVEL.** Ft. Above Perm. Datum \_\_\_\_\_  
 Well Depths Measured from **GROUND LEVEL.** G.L. \_\_\_\_\_

Run No. **ONE**

Date **16 MAR 70**

First Reading **302**

Last Reading **000**

Footage Logged **302**

Depth Reached **303**

Depth Driller **WYS**

Casing Roke \_\_\_\_\_

Casing Driller \_\_\_\_\_

Fluid Type **WATER**

Liquid Level **19 FT.**

Min. Diam. \_\_\_\_\_

Operating Time **2 HRS**

Truck No. **10**

**312**

Recorded By **PETERSON** Witnessed By **BUTREVOCHOK**

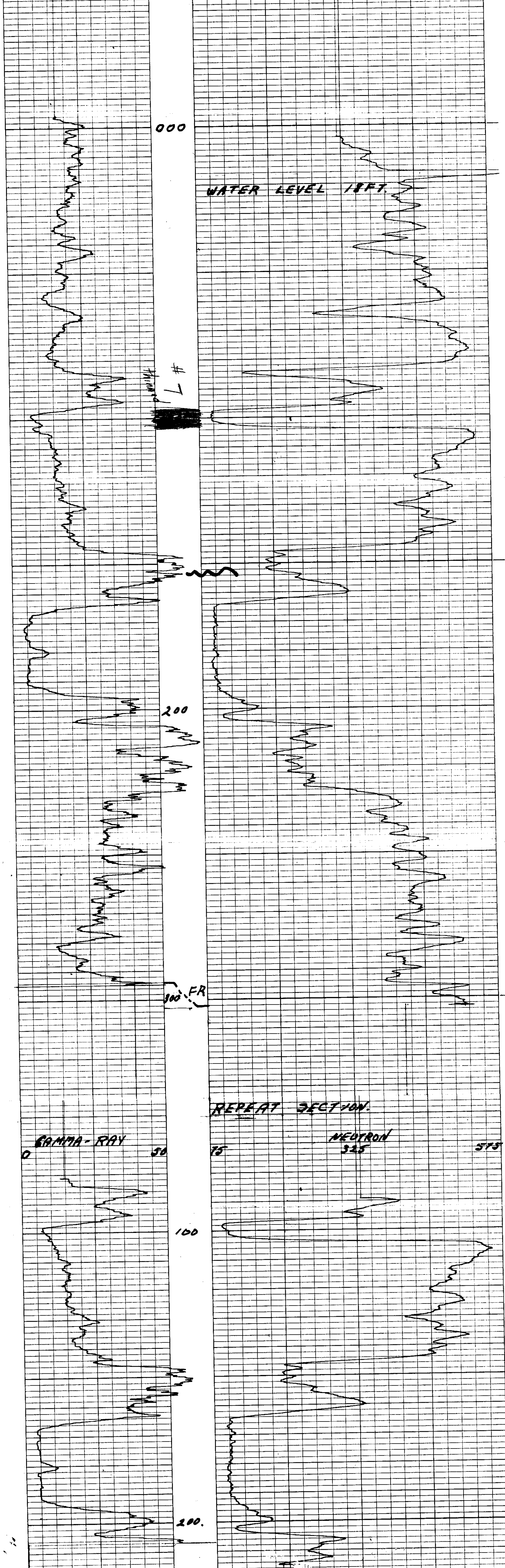
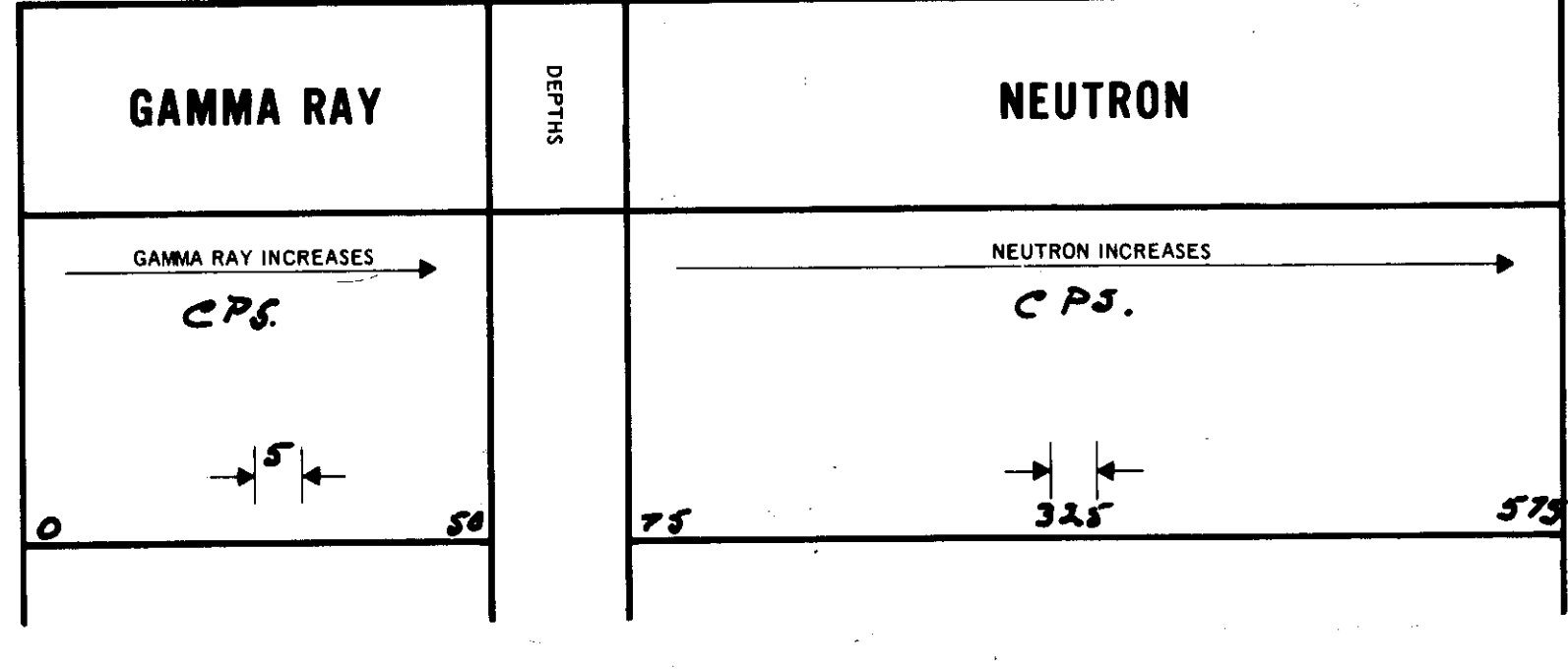
### EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.		RUN NO.	
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/2	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	1 1/2
TYPE	GEIGER	DETECTOR MODEL NO.	
LENGTH	18 INCH	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	8.55 FT	LENGTH	6 INCH
		SOURCE MODEL NO.	MRC-N-SS-W
		SERIAL NO.	598
GENERAL		SPACING	19 INCHES.
HOIST TRUCK NO.	10	TYPE	AmBe
INSTRUMENT TRUCK NO.		STRENGTH	6.94 x 10 <sup>6</sup> N/S
TOOL SERIAL NO.	CCN270465		

### LOGGING DATA

RUN NO.	DEPTHS		SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	GAMMA RAY		T.C. SEC.	SENS SETTINGS	NEUTRON	
	FROM	TO				ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.			ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	000	302	13	4	25	0	5 CPS.	4	5	36	25 CPS.
2	100	200	13	4	25	0	5 CPS.	4	5	36	25 CPS.

REMARKS



# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

K - FORMER 7013A-1

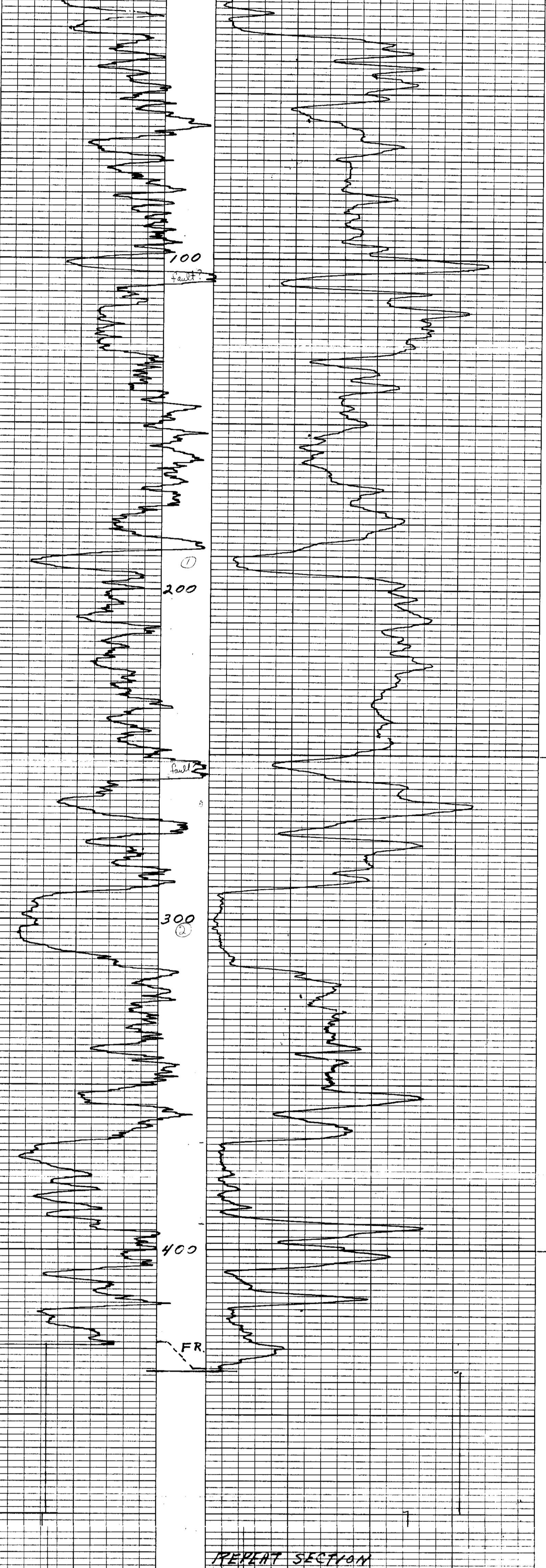
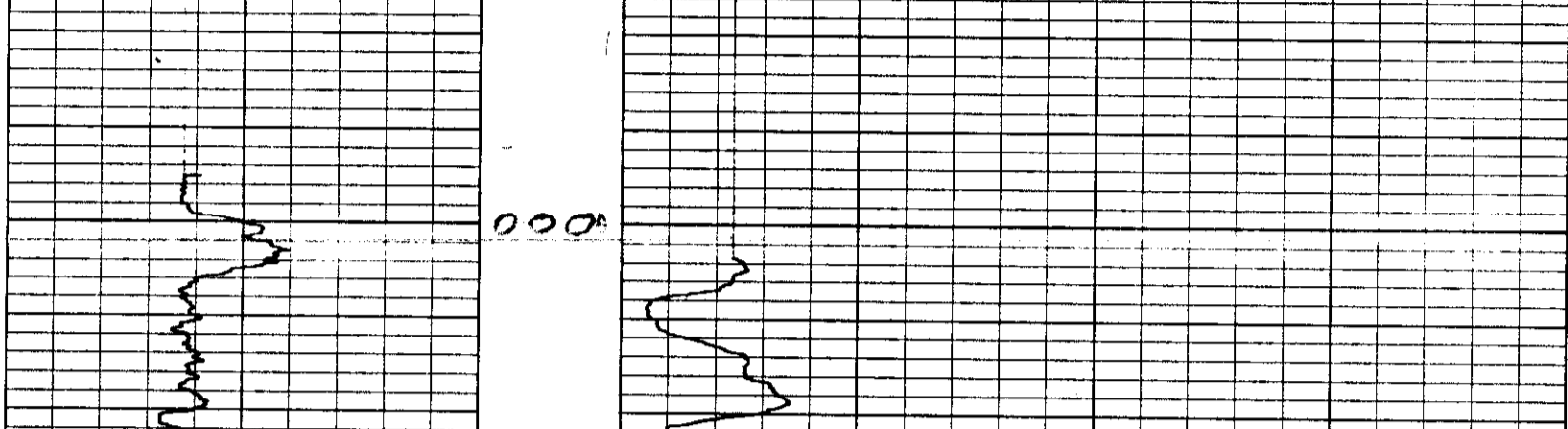
FILE NO.	COMPANY: <b>FORDING OIL CO. LTD.</b>
WELL: <b>129</b>	LOCATION: <b>TURNBULL MTD.</b>
SEC: _____	TWP: _____
R&E: _____	W: _____
M: _____	FIELD: <b>EDDINGS RIVER</b>
PROVINCE: <b>BRITISH COLUMBIA</b>	
PARAMOUNT DATA: <b>GRAND LEVEL</b>	FL. ABOVE PERM. DRAIN: _____
LOG MEASURED FROM: <b>GRAND LEVEL</b>	WELL DEPTH MEASURED FROM: _____
Run No.	<b>ONE</b>
Date	<b>4 MAR 70</b>
First Reading	<b>436</b>
Last Reading	<b>000</b>
Footage Logged	<b>436</b>
Depth Reached	<b>437</b>
Depth Driller	<b>609</b>
Casing Driller	
Fluid Type	<b>WATER</b>
Liquid Level	<b>000 FT.</b>
Min. Diam.	
Operating Time	
Truck No.	
Recorded By: <b>PERSON</b>	Witnessed By: <b>ELLENHART</b>

312

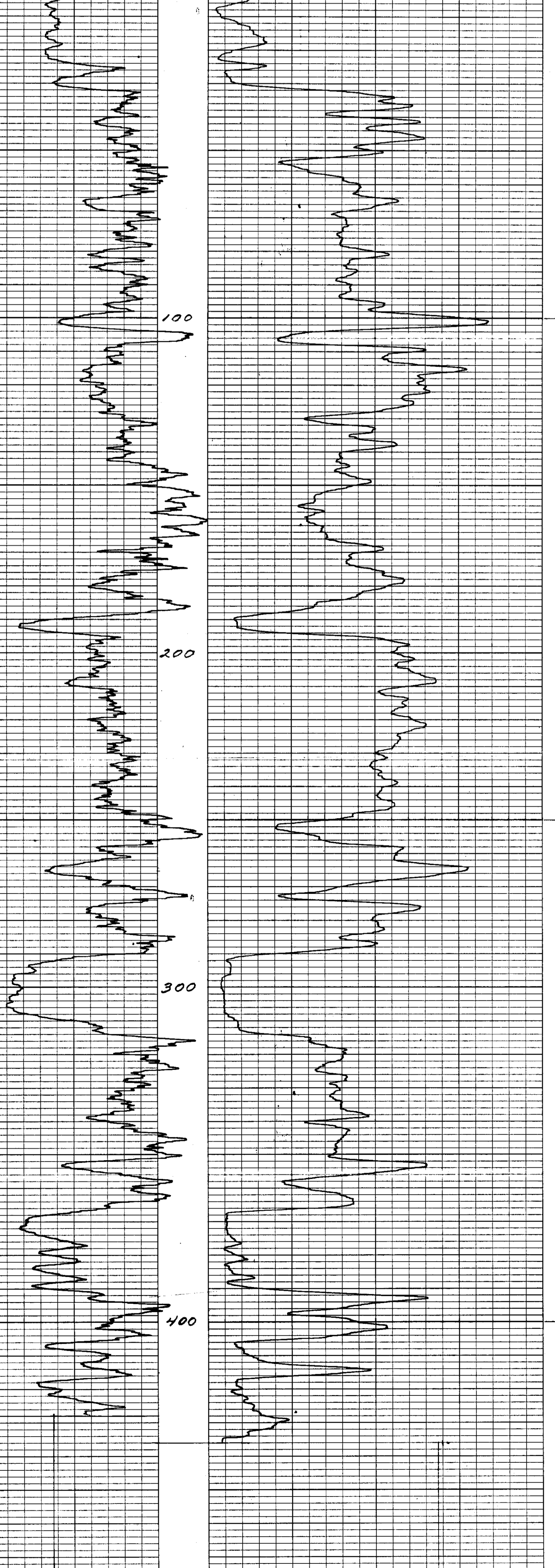
GAMMA RAY		NEUTRON	
RUN NO.	<b>ONE</b>	RUN NO.	<b>ONE</b>
TOOL MODEL NO.		LOG TYPE	<b>NEUTRON/NEUTRON</b>
DIAMETER	<b>1 1/2 INCHES</b>	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	<b>1 1/2 INCHES</b>
TYPE	<b>GEIGER</b>	DETECTOR MODEL NO.	
LENGTH	<b>18 INCHES</b>	TYPE	<b>PROPORTIONAL</b>
DISTANCE TO N. SOURCE	<b>8.55 FEET</b>	LENGTH	<b>6 INCHES</b>
		SOURCE MODEL NO.	<b>MRS-N-55-W.</b>
		SERIAL NO.	<b>578</b>
		SPACING	<b>19 INCHES</b>
		TYPE	<b>HAGEL</b>
		STRENGTH	<b>6.7410<sup>4</sup> N/S.</b>

GENERAL		GAMMA RAY				NEUTRON				
RUN NO.	DEPTHS FROM TO	SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API GR UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N UNITS PER LOG DIV.
1	000 436	13	3	25	0	5 CPS.	3	5	3 L	25 CPS.
2	000 436	13	3	25	0	5 CPS.	3	5	3 L	25 CPS.

REMARKS



REPEAT SECTION



# ROKE

GAMMA RAY NEUTRON LOG

R-500000 70(3)A-1

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO. COMPANY **FORDING COAL CO.**

WELL **RH 134**

LOCATION **TURNBULL MOUNTAIN**

FIELD **FORDING**

PROVINCE **BRITISH COLUMBIA**

Permanent Datum **GROUND LEVEL** Elev. \_\_\_\_\_  
 Log Measured from **GROUND LEVEL** Ft. Above Perm. Datum \_\_\_\_\_  
 Well Depths Measured from **GROUND LEVEL** G.L. \_\_\_\_\_

Run No.	<b>ONE</b>
Date	<b>11 FEB/10</b>
First Reading	<b>361</b>
Last Reading	<b>000</b>
Footage Logged	<b>361</b>
Depth Reached	<b>362</b>
Casing Driller	
Fluid Type	<b>WATER</b>
Liquid Level	<b>61</b>
Min. Diam.	
Operating Time	<b>2 HRS.</b>
Truck No.	<b>10</b>
Recorded By	<b>BANKS</b>
Witnessed By	<b>PENSON.</b>

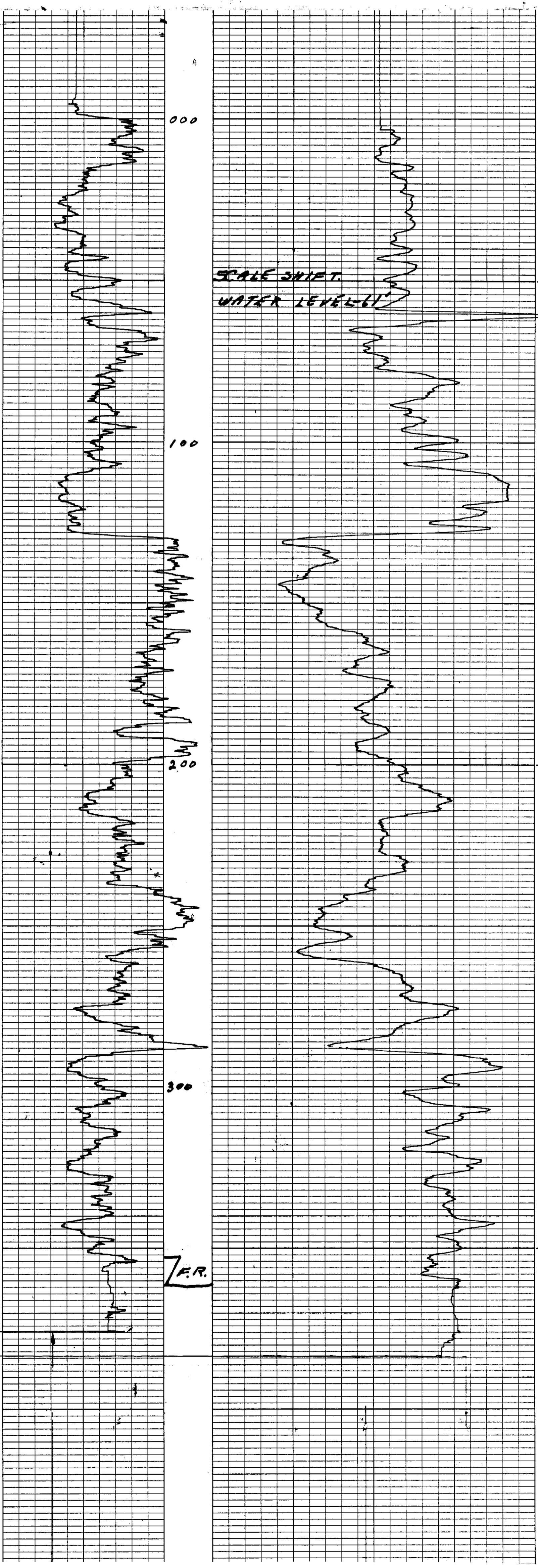
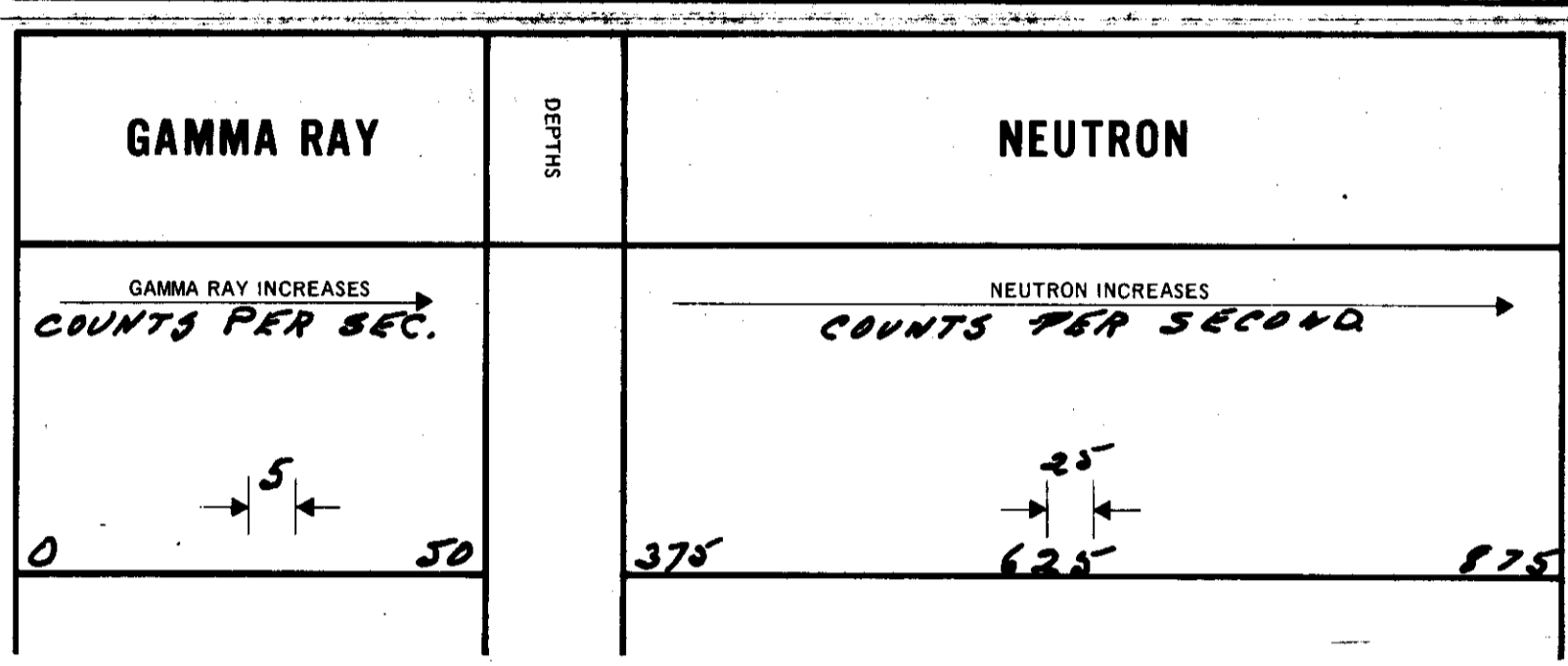
**312**

EQUIPMENT DATA		NEUTRON	
RUN NO.	<b>ONE</b>	RUN NO.	<b>ONE</b>
TOOL MODEL NO.		LOG TYPE	<b>NEUTRON/NEUTRON</b>
DIAMETER	<b>1 1/2"</b>	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	<b>1 1/2"</b>
TYPE	<b>GIEGER</b>	DETECTOR MODEL NO.	
LENGTH	<b>18"</b>	TYPE	<b>PROPORTIONAL</b>
DISTANCE TO N. SOURCE	<b>8.55'</b>	LENGTH	<b>6"</b>
		SOURCE MODEL NO.	<b>MRC-N-55-W.</b>
GENERAL		SERIAL NO.	<b>598</b>
HOIST TRUCK NO.	<b>10</b>	SPACING	<b>19"</b>
INSTRUMENT TRUCK NO.		TYPE	<b>AM BE</b>
TOOL SERIAL NO.	<b>CEN270VAB5</b>	STRENGTH	<b>6.7N X 10<sup>6</sup> N/SEC.</b>

LOGGING DATA		GAMMA RAY		NEUTRON							
RUN NO.		DEPTHS	SPEED	T.C.	SENS.	ZERO	API G.R. UNITS	T.C.	SENS.	ZERO	API N. UNITS
		FROM	FT/MIN	SEC	SETTINGS	DIV. L OR R	PER LOG DIV.	SEC.	SETTINGS	DIV. L OR R	PER LOG DIV.
<b>1</b>		<b>000</b>	<b>12</b>	<b>3</b>	<b>25</b>	<b>0</b>	<b>5 CPS.</b>	<b>3</b>	<b>5</b>	<b>15 L.</b>	<b>25 CPS.</b>
		<b>61</b>	<b>12</b>	<b>3</b>	<b>25</b>	<b>0</b>	<b>5 CPS.</b>	<b>3</b>	<b>5</b>	<b>3 L.</b>	<b>25 CPS.</b>

REMARKS **NOTE SCALE SHIFT AT 61'**



Greenhills  
 RH 141 to RH 179  
 MULLING - 158159.165 to 167.  
 170, 171, 175, 174, 177

NEUTRON LOG

ALBERTA

FILE NO. \_\_\_\_\_  
 COMPANY **CORDON COALS CO. LTD.**  
 WELL **141**  
 LOCATION **GREENHILLS**  
 FIELD **FORDS RIVER**  
 PROVINCE **BRITISH COLUMBIA**

Permitment Datum \_\_\_\_\_ Elev. \_\_\_\_\_  
 Log Measured from **GROUND LEVEL** Fl. Above Perm. Datum \_\_\_\_\_  
 Well Depths Measured from **GROUND LEVEL** G.L. \_\_\_\_\_

Run No. **ONE**  
 Date **MAR 20**  
 First Reading **280**  
 Last Reading **280**  
 Footage Logged **000**  
 Depth Reached **281**  
 Depth Driller **415**

Casing Role \_\_\_\_\_  
 Fluid Type **WATER**  
 Liquid Level **000 FT**  
 Min. Diam. \_\_\_\_\_

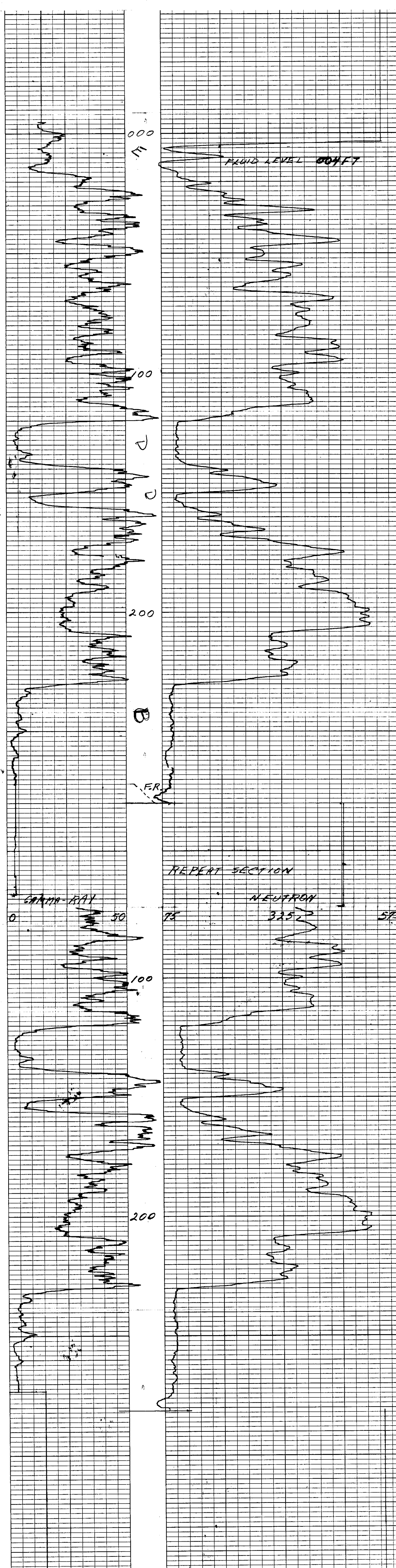
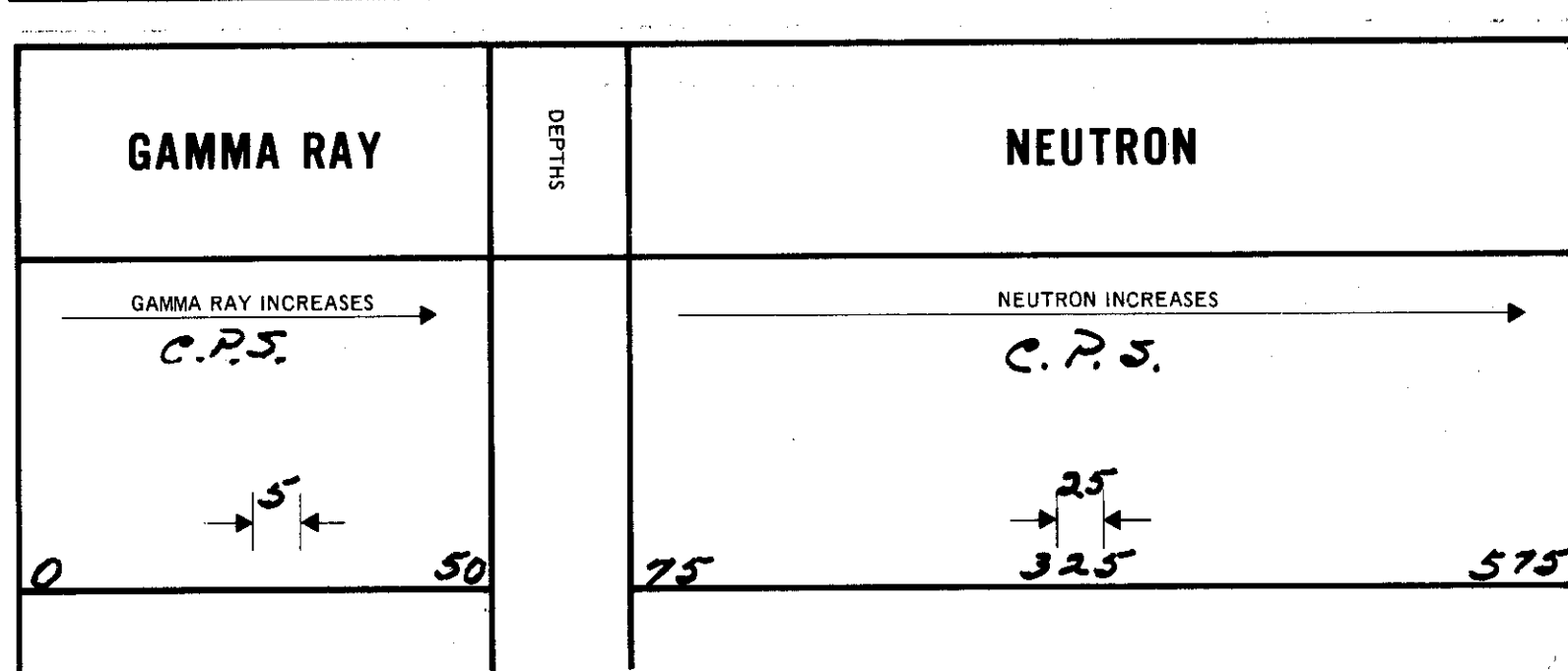
Operating Time \_\_\_\_\_  
 Truck No. **10**

Recorded By **W. J. PETERSON** Witnessed By **W. J. PETERSON**

EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	<b>ONE</b>	RUN NO.	<b>ONE</b>
TOOL MODEL NO.		LOG TYPE	<b>NEUTRON/NEUTRON</b>
DIAMETER	<b>1 1/2 INCHES</b>	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	<b>1 1/2 INCHES</b>
TYPE	<b>GEIGER</b>	DETECTOR MODEL NO.	
LENGTH	<b>18 INCHES</b>	TYPE	<b>PROPORTIONAL</b>
DISTANCE TO N. SOURCE	<b>9.55 FEET</b>	LENGTH	<b>6 INCHES</b>
		SOURCE MODEL NO.	<b>MRC-N-55-W.</b>
		SERIAL NO.	<b>578</b>
HOIST TRUCK NO.	<b>10</b>	SPACING	<b>19 INCHES</b>
INSTRUMENT TRUCK NO.		TYPE	<b>AM BE</b>
TOOL SERIAL NO.	<b>C6270425</b>	STRENGTH	<b>6.04X10<sup>4</sup> N/S.</b>

LOGGING DATA											
RUN NO.	GENERAL DEPTHS		SPEED FT/MIN	T.C. SEC.	SENS. SETTINGS	GAMMA RAY		NEUTRON			
	FROM	TO				ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	000	280	13	3	25	0	5 CPS.	3	5	31	25 CPS.
2	100	280	13	3	25	0	5 CPS.	3	5	31	25 CPS.



K-FORENSIS 201302-1 Mr. Alfred A. Tappé - 20/9/72

# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO. COMPANY **FORDING COAL CO.**

WELL **RH 142**

LOCATION **GREEN HILLS**

FIELD **FORDING RIVER**

PROVINCE **BRITISH COLUMBIA**

Permanently Datum: **GROUND LEVEL** Elev. **K.B.**  
 Last Measured from: **GROUND LEVEL** Ft. Above Perm. Datum: **D.F.**  
 Well Depths Measured from: **GROUND LEVEL** G.L.

Run No. **ONE**

Date **20 MAR 70**

First Reading **365**

Last Reading **365**

Footage Logged **366**

Depth Reached **470**

Depth Driller **-**

Casing Roker **-**

Casing Driller **-**

Fluid Type **WATER**

Liquid Level **45 FT.**

Min. Diam. **-**

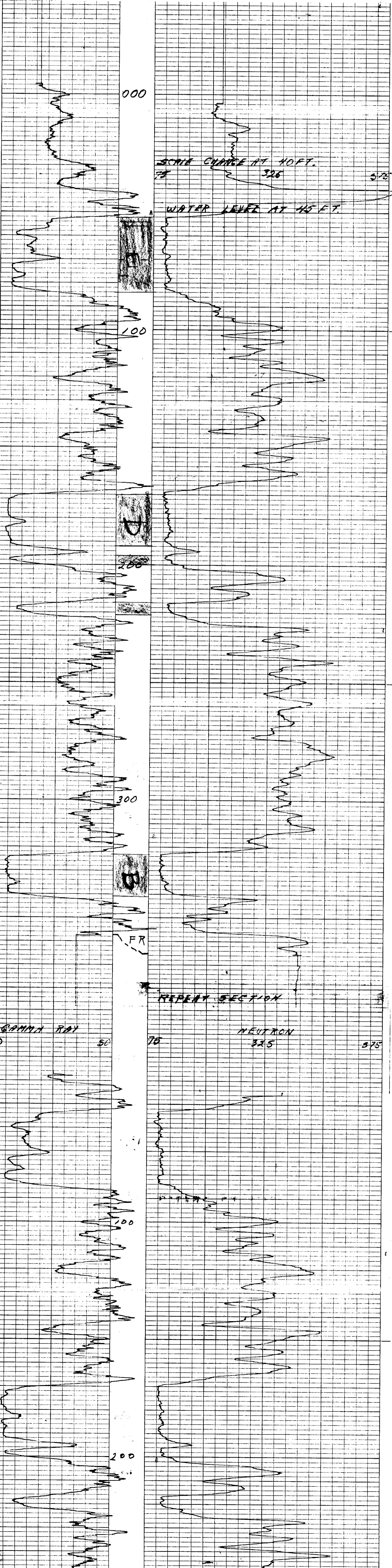
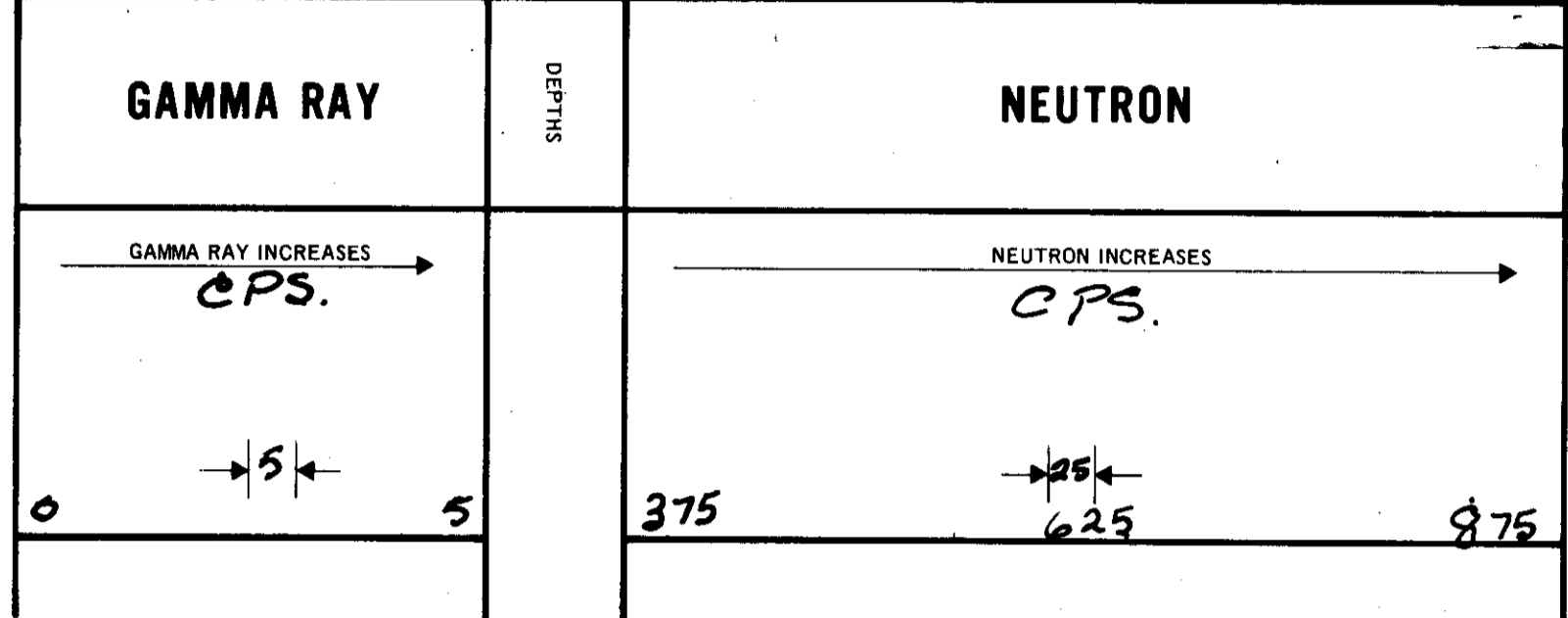
Operating Time **2 HRS.**

Truck No. **10**

Recorded By **PETERSON** Witnessed By **BUTRENCHUI**

**372**

EQUIPMENT DATA										
GAMMA RAY		NEUTRON								
RUN NO.	<b>ONE</b>	RUN NO.	<b>ONE</b>							
TOOL MODEL NO.		LOG TYPE	<b>NEUTRON/NEUTRON</b>							
DIAMETER	<b>1 11/16</b>	TOOL MODEL NO.								
DETECTOR MODEL NO.		DIAMETER	<b>1 11/16</b>							
TYPE	<b>GEIGER</b>	DETECTOR MODEL NO.								
LENGTH	<b>18 INCH</b>	TYPE	<b>PROPORTIONAL</b>							
DISTANCE TO N. SOURCE	<b>8.56 FT.</b>	LENGTH	<b>6 INCH</b>							
		SOURCE MODEL NO.	<b>MAC-N-55-W</b>							
GENERAL		SERIAL NO.	<b>599</b>							
HOIST TRUCK NO.	<b>10</b>	SPACING	<b>19 INCHES</b>							
INSTRUMENT TRUCK NO.		TYPE	<b>Am<sup>135</sup>Be</b>							
TOOL SERIAL NO.	<b>C9N37U4A65</b>	STRENGTH	<b>6.94 x 10<sup>6</sup> N/S</b>							
LOGGING DATA										
GENERAL		GAMMA RAY		NEUTRON						
RUN NO.	DEPTHS FROM TO	SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API GR UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	000 040	13	4	25	0	5 CPS.	4	5	15 L	25 CPS
	040 365	13	4	25	0	5 CPS.	4	5	3L	25 CPS
2	050 230	13	4	25	0	5 CPS.	4	5	3L	25 CPS
REMARKS										



# ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

K-500000 20(3)A-1

FILE NO.	COMPANY	FORDING COAL CO. LTD.
LSD	WELL	RH 142
SEC	TWP	GREENHILLS
RGE	LOCATION	FORDING RIVER
M	FIELD	FORDING RIVER
	PROVINCE	BRITISH COLUMBIA
Permanent Datum	GROUND LEVEL	Elev. _____
Log Measured from	GROUND LEVEL	Fl. Above Perm. Datum
Well Depths Measured from	GROUND LEVEL	D.F. _____
		G.L. _____
Run No.	ONE	
Date	20 MAR/70	
First Reading	365	
Last Reading	0	
Footage Logged	365	
Depth Reached	365	
Depth Driller	470	
Casing Role		
Casing Driller		
Fluid Type	WATER	
Liquid Level	45	
Min. Diam.		
Operating Time	2 HOURS	
Truck No.	10	
Recorded By	PETERSON	Witnessed By
		HUTTENBACHER

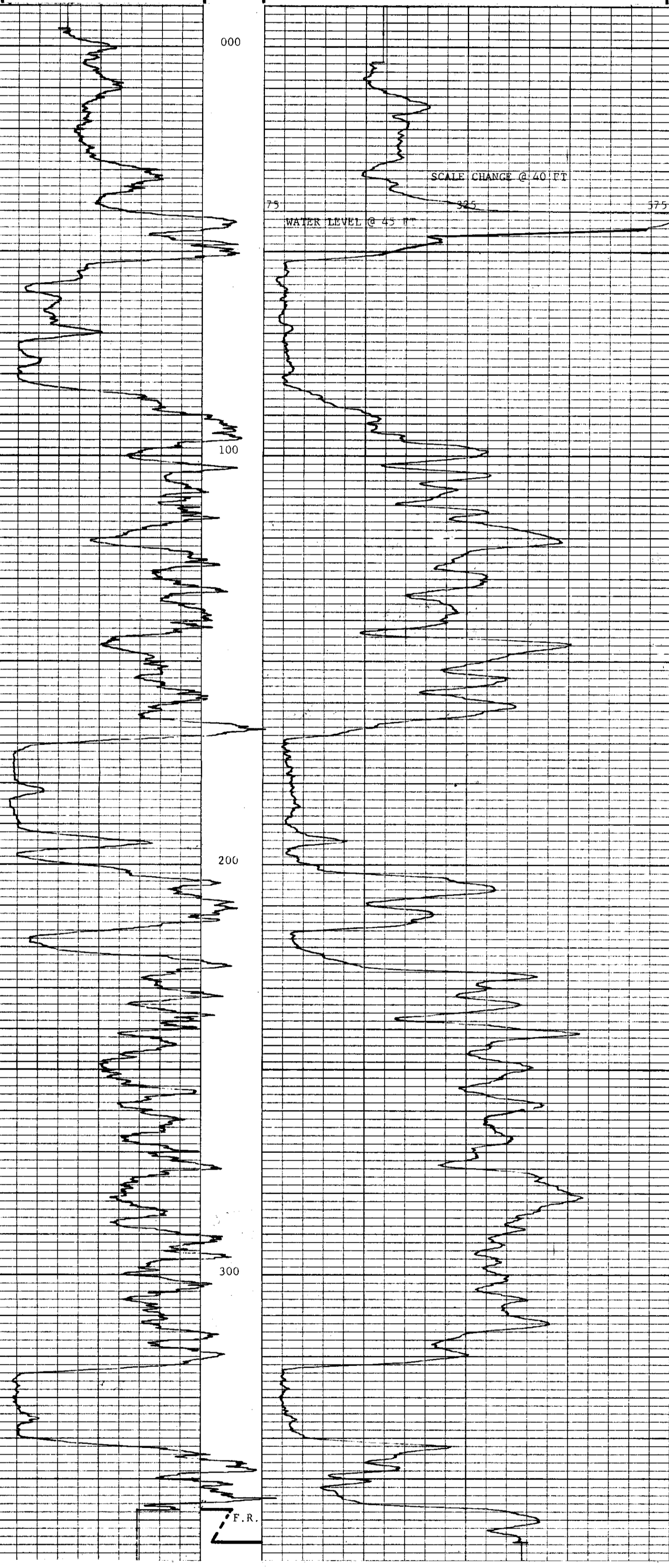
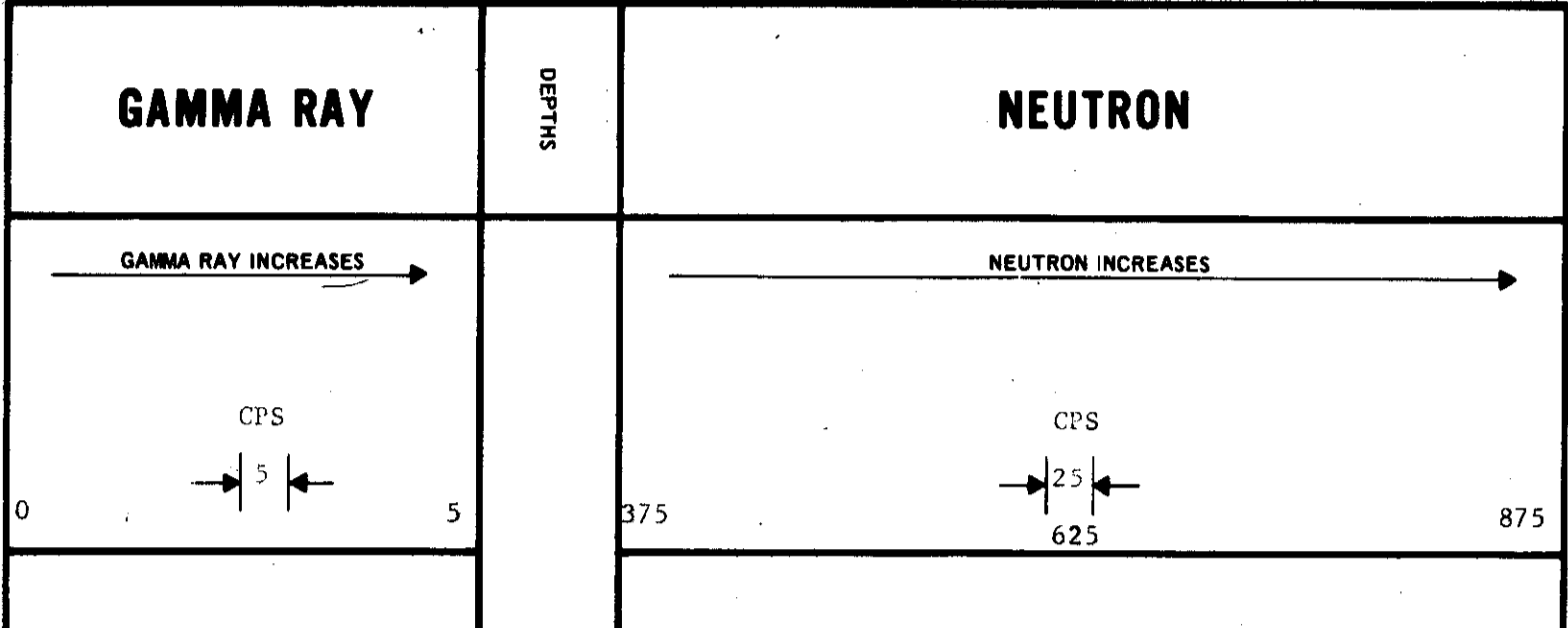
312

EQUIPMENT DATA					
GAMMA RAY			NEUTRON		
RUN NO.	ONE			RUN NO.	ONE
TOOL MODEL NO.	1 1/2			LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/2			TOOL MODEL NO.	1 1/2
DETECTOR MODEL NO.	GEIGER			DIAMETER	1 1/2
TYPE	18 INCH			DETECTOR MODEL NO.	PROPORTIONAL
LENGTH	8.55 FT			LENGTH	6 INCH
DISTANCE TO N. SOURCE				SOURCE MODEL NO.	MRC-N-SS-W
GENERAL			SERIAL NO.	598	
HOIST TRUCK NO.	10			SPACING	19 INCH
INSTRUMENT TRUCK NO.				TYPE	AmBe
TOOL SERIAL NO.	CGR2744A65			STRENGTH	6.94 x 10 <sup>6</sup> N/S

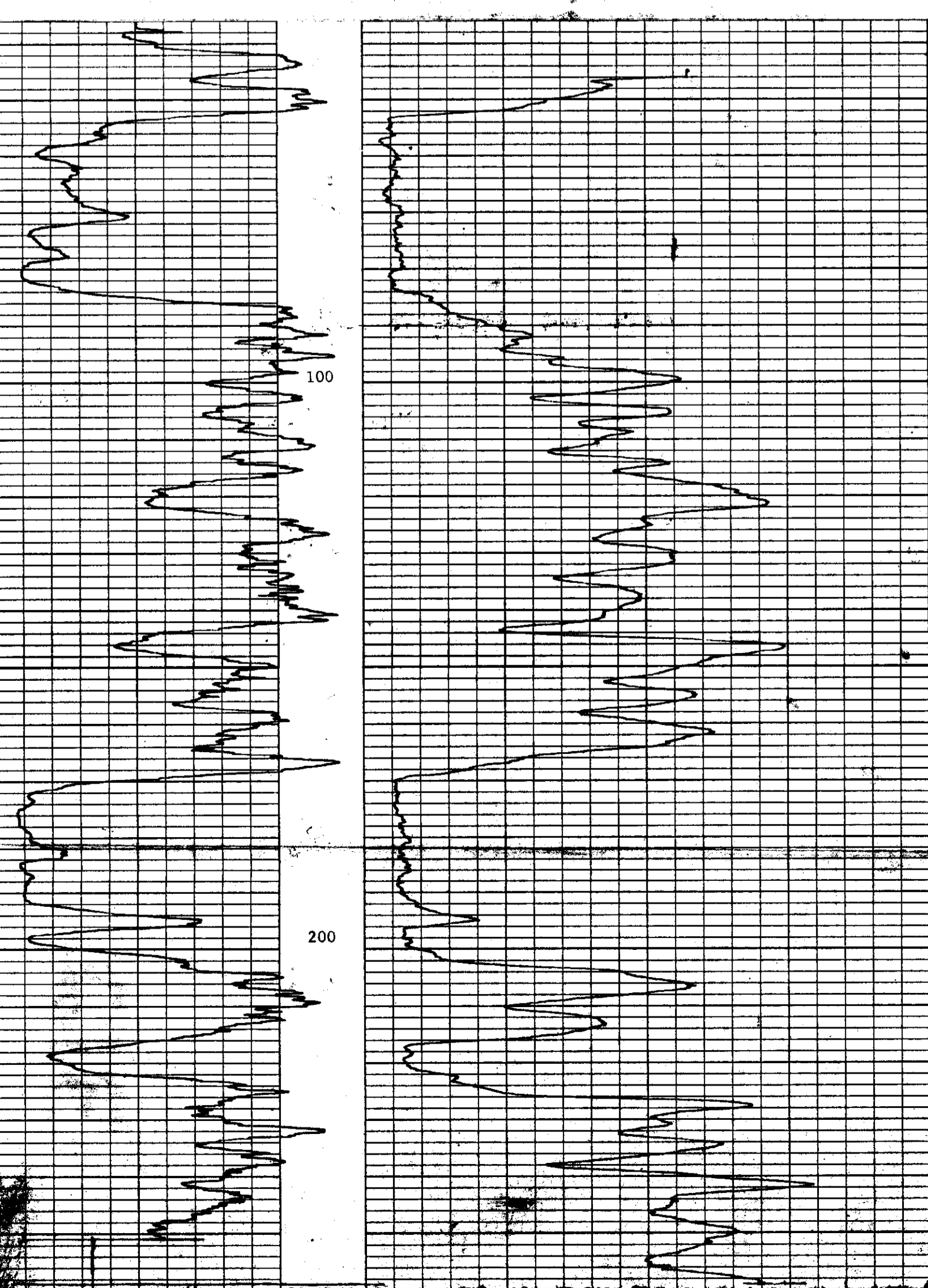
LOGGING DATA											
RUN NO.	GENERAL		GAMMA RAY					NEUTRON			
	FROM	TO	SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	000	040	13	4	25	0	5 cps	4	5	15L	25 cps
	040	365	13	4	25	0	5 cps	4	5	3L	25 cps
2	050	250	13	4	25	0	5 cps	4	5	3L	25 cps

REMARKS



REPEAT SECTION

GAMMA RAY      NEUTRON



K - FROGSKINS 70(3)A-1

# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO. \_\_\_\_\_  
 COMPANY **FOAMING CONCRETE**  
 WELL **RH 143**  
 TWP **GREEN HILL**  
 RGE \_\_\_\_\_  
 W \_\_\_\_\_ M \_\_\_\_\_

LOCATION **GREEN HILL**  
 FIELD **FOORDING**  
 PROVINCE **BRITISH COLUMBIA**

Permanent Datum **GROUND LEVEL** Elev. \_\_\_\_\_ K.B. \_\_\_\_\_  
 Log Measured from **GROUND LEVEL** Ft. Above Perm. Datum D.F. \_\_\_\_\_  
 Well Depths Measured from **GROUND LEVEL** G.L. \_\_\_\_\_

Run No. **ONE**  
 Date **11 FEB. 1960**  
 First Reading **413**  
 Last Reading **000**  
 Footage Logged **413**  
 Depth Reached **413**

Drift Driller \_\_\_\_\_  
 Casing Driller \_\_\_\_\_  
 Casing Role \_\_\_\_\_  
 Fluid Type **WATER**  
 Liquid Level **4'**  
 Min. Diam. \_\_\_\_\_

Operating Time **2 HRS.**  
 Truck No. **10**  
 Recorded By **BANKS** Witnessed By **PEARSON**

**312**

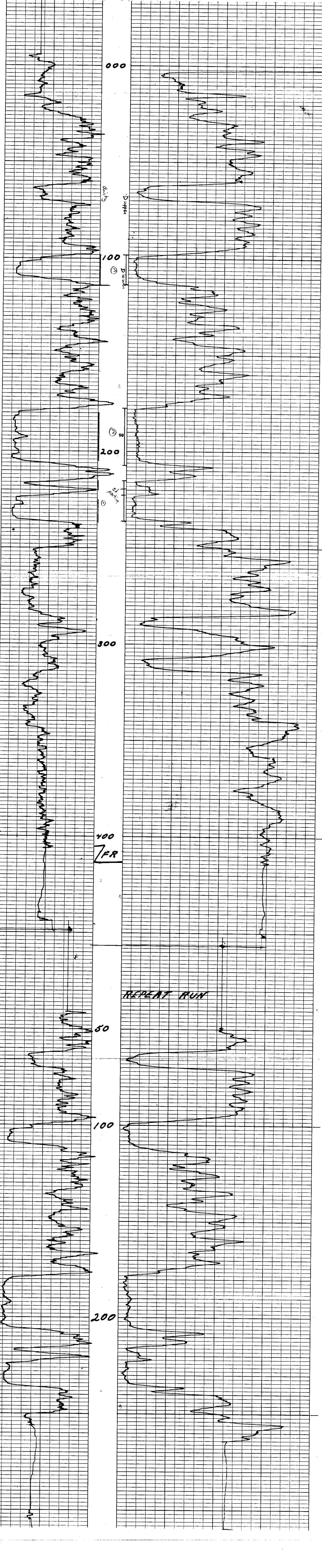
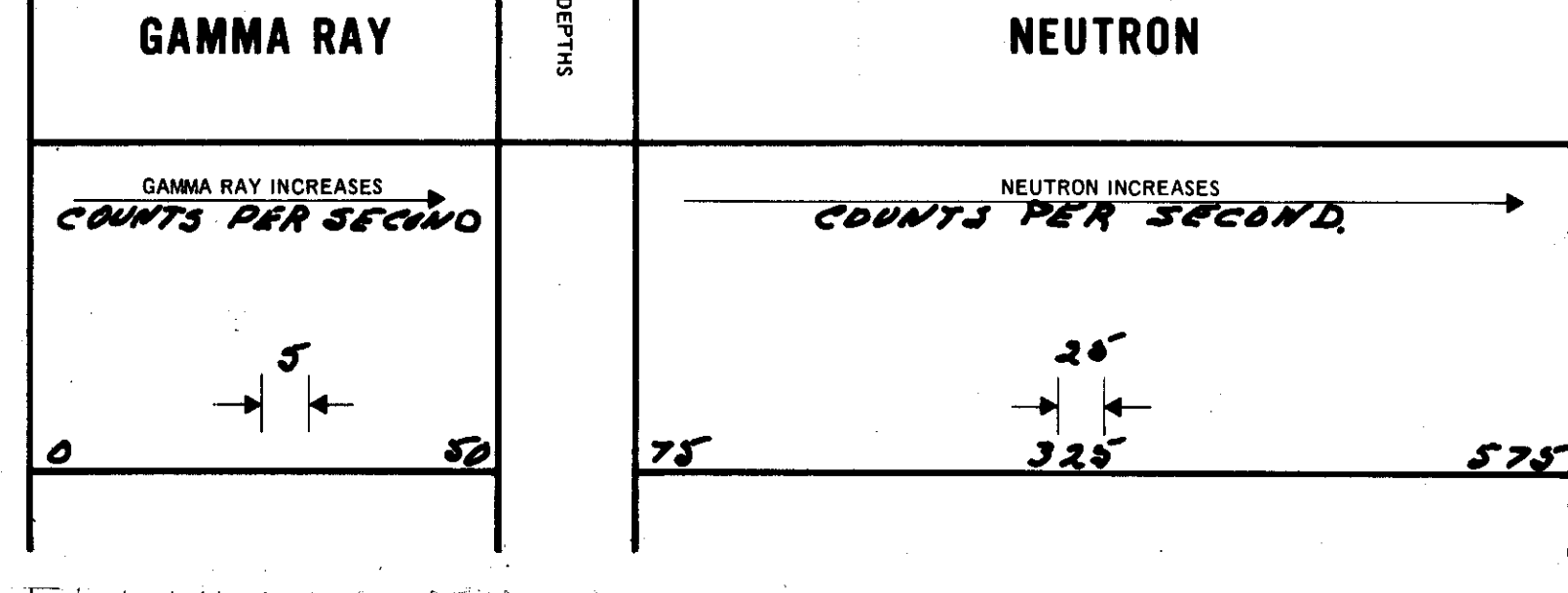
### EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	<b>ONE</b>	RUN NO.	<b>ONE</b>
TOOL MODEL NO.		LOG TYPE	<b>NEUTRON/NEUTRON</b>
DIAMETER	<b>1 1/2"</b>	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	<b>1 1/2"</b>
TYPE	<b>GIEGER</b>	DETECTOR MODEL NO.	
LENGTH	<b>18"</b>	TYPE	<b>PROPORTIONAL</b>
DISTANCE TO N. SOURCE	<b>8.55'</b>	LENGTH	<b>6"</b>
		SOURCE MODEL NO.	<b>MRC-N-55-W</b>
		SERIAL NO.	<b>528</b>
		SPACING	<b>19"</b>
		TYPE	<b>RA BK</b>
		STRENGTH	<b>6-PYR10 N/SEC.</b>

### LOGGING DATA

GENERAL		GAMMA RAY				NEUTRON				
RUN NO.	DEPTHS FROM TO	SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
<b>1</b>	<b>000 413</b>	<b>12</b>	<b>3</b>	<b>25</b>	<b>0</b>	<b>25 CPS.</b>	<b>3</b>	<b>5</b>	<b>3L</b>	<b>25 CPS.</b>

REMARKS \_\_\_\_\_





K-Forming 20(3)A-1

# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO. COMPANY **FORBINE CORP. CO. LTD.**

WELL **144** LOCATION **GREENHILLS**

RGE **FORBINE RIVER.**

FIELD **FORBINE RIVER.**

PROVINCE **BRITISH COLUMBIA**

Permanent Datum **CERAMIC LEVEL** Elev. **5277.0**

Log Measured from **CERAMIC LEVEL** Ft. Above Perm. Datum **0.0**

Well Depths measured from **CERAMIC LEVEL** C.L. **0.0**

Run No. **ONE**

Date **5 MAR 1960**

First Reading **396**

Last Reading **000**

Footage Logged **396**

Depth Reached **396**

Depth - Other **600**

Casing Fluid **WATER**

Fluid Type **OIL FT.**

**312**

Operating Time **2 HRS.**

Truck No. **10**

Recorded By **PETERSON** Witnessed By **BYRENEWARK**

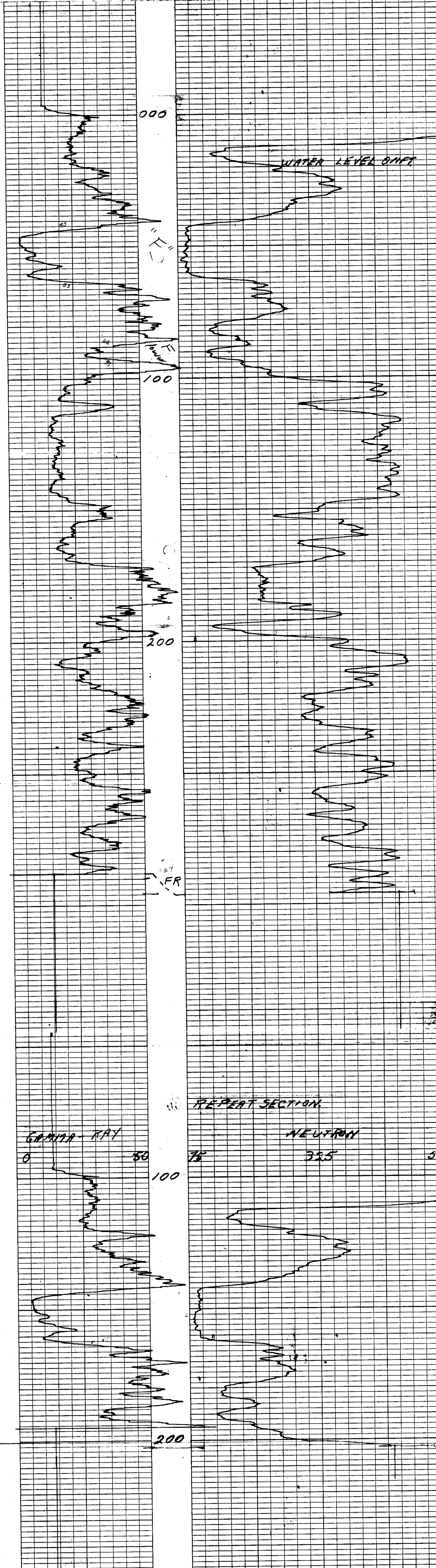
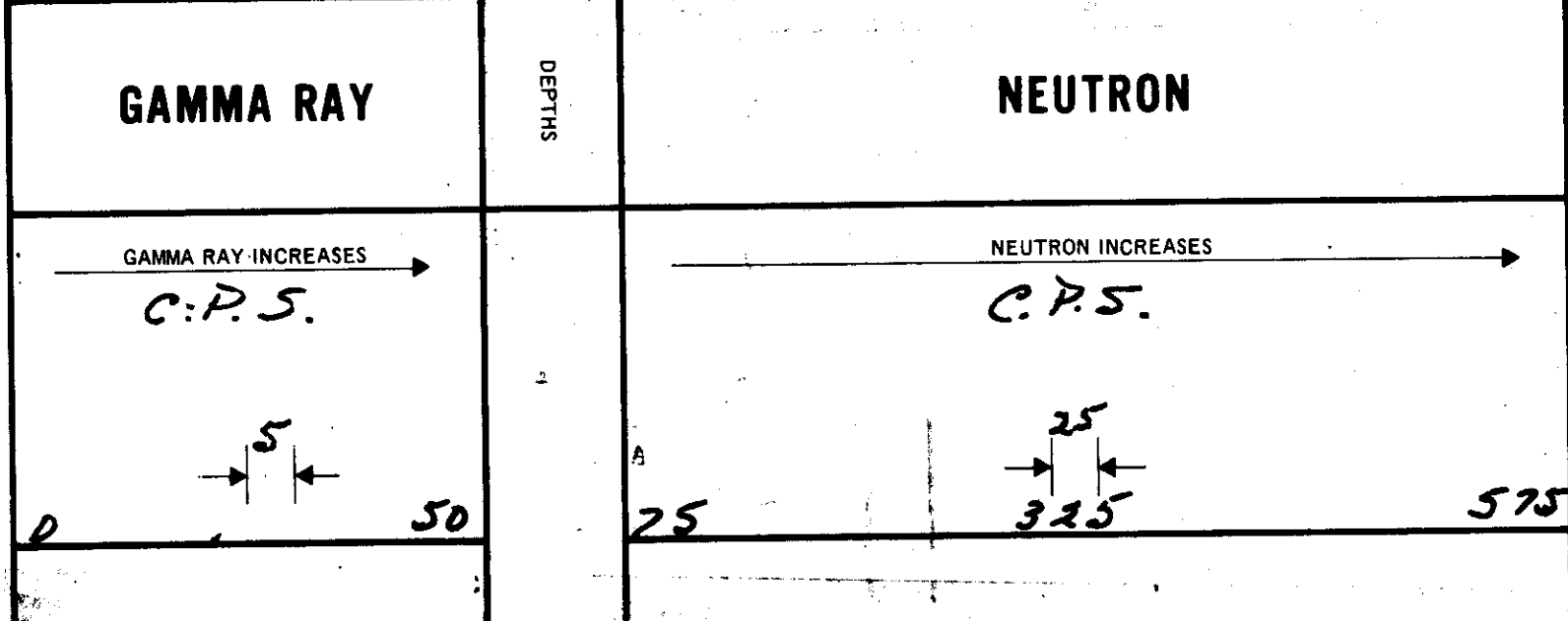
EQUIPMENT DATA

GAMMA RAY				NEUTRON			
RUN NO.	<b>ONE</b>			RUN NO.	<b>ONE</b>		
TOOL MODEL NO.				LOG TYPE	<b>NEUTRON/NEUTRON</b>		
DIAMETER	<b>1 1/2 INCHES.</b>			TOOL MODEL NO.			
DETECTOR MODEL NO.				DIAMETER	<b>1 1/2 INCHES.</b>		
TYPE	<b>CERAR</b>			DETECTOR MODEL NO.			
LENGTH	<b>18 INCHES</b>			TYPE	<b>PROPORTIONAL.</b>		
DISTANCE TO N. SOURCE	<b>8.55 FEET.</b>			LENGTH	<b>6 INCHES</b>		
GENERAL				SOURCE MODEL NO.	<b>NRG-N-35-W.</b>		
HOIST TRUCK NO.	<b>10</b>			SERIAL NO.	<b>588.</b>		
INSTRUMENT TRUCK NO.				SPACING	<b>18 INCHES.</b>		
TOOL SERIAL NO.	<b>CGN2704065</b>			TYPE	<b>HM BE.</b>		
				STRENGTH	<b>6.04 X 10<sup>6</sup> N/S</b>		

LOGGING DATA

RUN NO.	DEPTHS		SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	GAMMA RAY		NEUTRON		API N. UNITS PER LOG DIV.	
	FROM	TO				ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS		ZERO DIV. L OR R
1	000	296	13	3	35	0	5	3	5	31	25 CPS.
2	000	100	13	3	25	0	5	3	5	34	25 CPS.

REMARKS



K-7060516 7015A-1

# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO. \_\_\_\_\_

COMPANY **ESSEX COAL CO. LTD.**

WELL **1452**

LOCATION **GREENHILLS**

FIELD **LODGING RIVER**

PROV. **BRITISH COLUMBIA**

Perm. Datum \_\_\_\_\_ Elev. \_\_\_\_\_ K.S. \_\_\_\_\_

Log Measured from **GROUND LEVEL** Ft. Above Perm. Datum \_\_\_\_\_ D.F. \_\_\_\_\_

Well Depths Measured from **GROUND LEVEL** G.L. \_\_\_\_\_

Run No. **ONE**

Date **5 MAR 70**

First Reading **000**

Last Reading **575**

Footage Logged **575**

Depth Banded **575**

Depth Driller **630**

Casing Driller \_\_\_\_\_

Fluid Type **WATER**

Liquid Level **005 FT.**

Min. Diam. \_\_\_\_\_

Operating Time **2 HRS.**

Truck No. **10**

Recorded By **PETERSON**

Witnessed By **BURBENCKY**

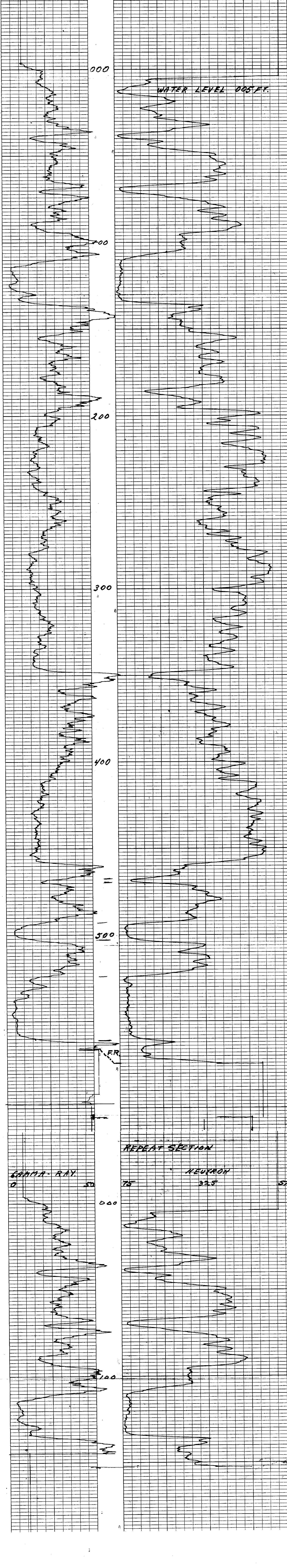
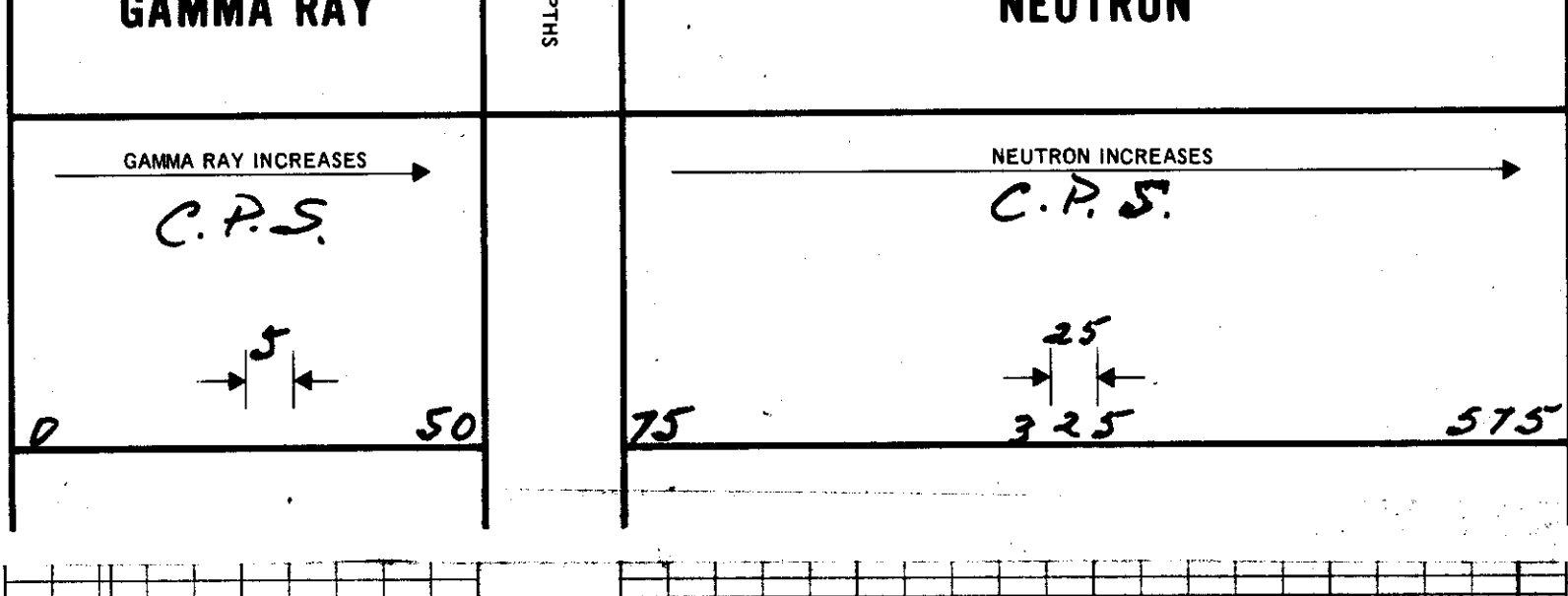
**312**

WELL DEPTHS MEASURED FROM GROUND LEVEL

GAMMA RAY				NEUTRON			
RUN NO.	<b>ONE</b>			RUN NO.	<b>ONE</b>		
TOOL MODEL NO.				LOG TYPE	<b>NEUTRON/NEUTRON</b>		
DIAMETER	<b>1 1/2 INCHES.</b>			TOOL MODEL NO.			
DETECTOR MODEL NO.				DIAMETER	<b>1 1/2 INCHES.</b>		
TYPE	<b>GEIGER.</b>			DETECTOR MODEL NO.			
LENGTH	<b>18 INCHES</b>			TYPE	<b>PROPORTIONAL.</b>		
DISTANCE TO N. SOURCE	<b>4.55 FEET.</b>			LENGTH	<b>6 INCHES</b>		
GENERAL				SOURCE MODEL NO.	<b>MRC-N-55-W</b>		
HOIST TRUCK NO.	<b>10.</b>			SERIAL NO.	<b>578</b>		
INSTRUMENT TRUCK NO.				SPACING	<b>6 INCHES.</b>		
TOOL SERIAL NO.				TYPE	<b>AMBE.</b>		
				STRENGTH	<b>6.94X10<sup>6</sup> N/S.</b>		

LOGGING DATA											
GENERAL				GAMMA RAY			NEUTRON				
RUN NO.	FROM	TO	SPEED FT./MIN	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	000	074	13	3	25	0	5 CPS.	3	5	3L	25 CPS.
2	000	150	13	3	25	0	5 CPS.	3	5	3L	25 CPS.

REMARKS



REPEAT SECTION

GAMMA RAY      NEUTRON

0      75      325      575

000

100

200

300

400

500

575

K-Forms 70(3)A-1

# ROKE

GAMMA RAY NEUTRON LOG

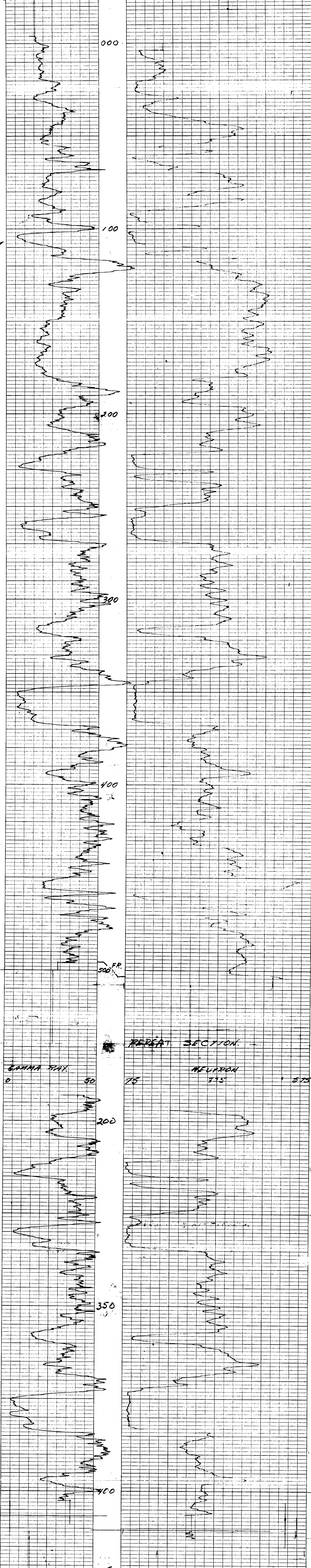
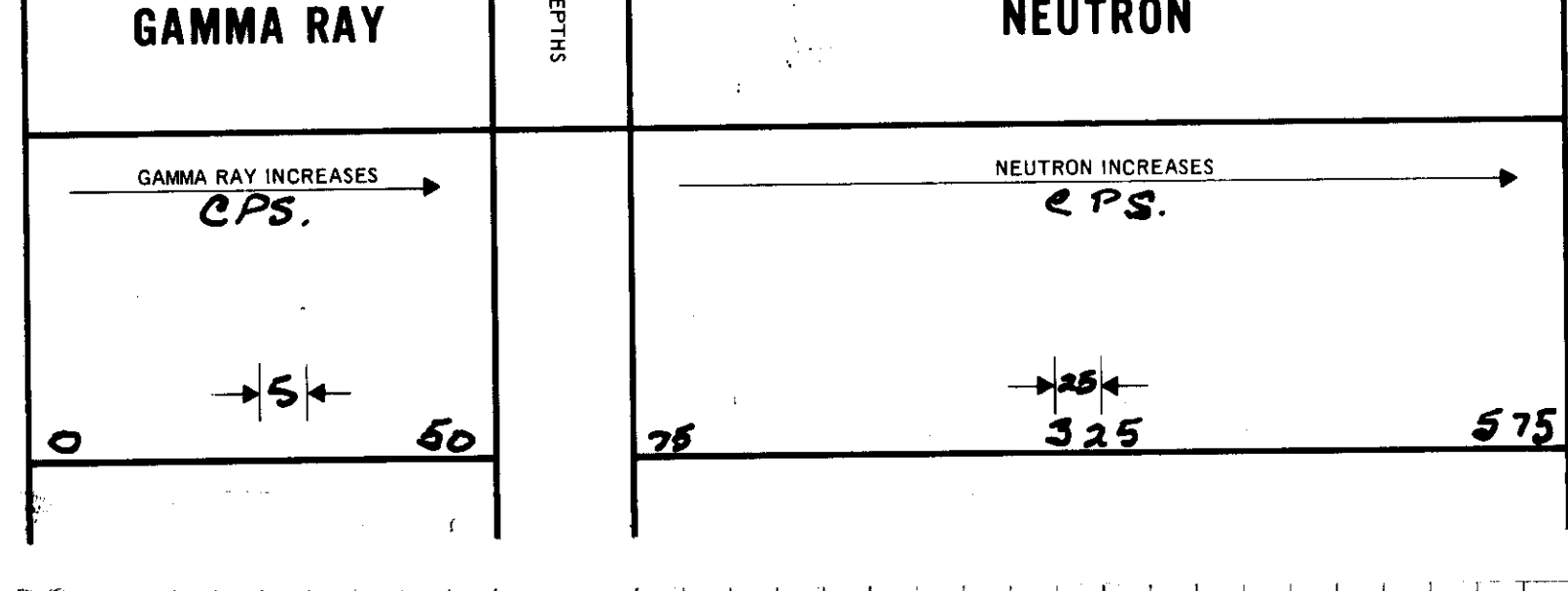
OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	COMPANY	WELL	LOCATION	FIELD	PROVINCE
LSD	FORDING Coal Co.	RH 146	GREEN HILLS	FORDING RIVER	BRITISH COLUMBIA
SEC					
TWP					
RGE					
M					
Permit No.	Log Measured From	Well Depths Measured From	Permit No.	Log Measured From	Well Depths Measured From
ONE	GRAND LEVEL	GRAND LEVEL	ONE	GRAND LEVEL	GRAND LEVEL
Date	58 MAR 70		Date	58 MAR 70	
First Reading	000		First Reading	000	
Last Reading	503		Last Reading	503	
Footage Logged	540		Footage Logged	540	
Depth Reached	540		Depth Reached	540	
Depth Driller			Depth Driller		
Casing Note			Casing Note		
Casing Outer			Casing Outer		
Fluid Type	WATER		Fluid Type	WATER	
Liquid Level	FULL		Liquid Level	FULL	
Min. Diam.			Min. Diam.		
Operating Time	2 hrs.		Operating Time	2 hrs.	
Truck No.	10		Truck No.	10	
Recorded By	PETERSON		Recorded By	PETERSON	
Witnessed By	BYRENCHUK		Witnessed By	BYRENCHUK	

EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/16	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	1 1/16
TYPE	GEIGER	DETECTOR MODEL NO.	
LENGTH	18 INCH	TYPE	PROPORTIONAL
DISTANCE TO SOURCE	8.55 FT.	LENGTH	6 INCH
		SOURCE MODEL NO.	MAC-N-55-W
		SERIAL NO.	598
		SPACING	19 INCHES
		TYPE	AmBe
		STRENGTH	6.44 x 10 <sup>6</sup> N/S

LOGGING DATA											
RUN NO.	GENERAL DEPTHS		SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	GAMMA RAY		NEUTRON			
	FROM	TO				ZERO DIV. L OR R	API GR UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	000	503	13	4	25	0	2 EPS.	4	5	3 L	25 CPS.
2	200	350	19	4	25	0	5 CPS.	4	5	3 L	25 CPS.

REMARKS



# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO. COMPANY **Fording Coal Co.**

WELL **RH 147 A.**

LOCATION **GREEN HILLS**

FIELD **FORDING RIVER**

PROVINCE **BATISH COLUMBIA**

W \_\_\_\_\_ M

Permitted Datum: **GREENHILL LEVEL** Elev. \_\_\_\_\_ K.B. \_\_\_\_\_  
 Log Measured from: **GREENHILL LEVEL** Ft. Above Perm. Datum \_\_\_\_\_ D.F. \_\_\_\_\_  
 Well Depths Measured from: **GREENHILL LEVEL** G.L. \_\_\_\_\_

Run No.	<b>ONE</b>
Date	<b>20 MAR 70</b>
First Reading	<b>877</b>
Last Reading	<b>800</b>
Footage Logged	<b>377</b>
Depth Reached	<b>478</b>
Depth Driller	<b>470</b>
Casing Role	
Casing Driller	
Fluid Type	<b>WATER</b>
Liquid Level	<b>16 FT.</b>
Min. Diam.	
Operating Time	<b>2 HRS.</b>
Truck No.	
Recorded By	<b>PETERSON</b>
Witnessed By	<b>BUTRENCHAK</b>

**312**

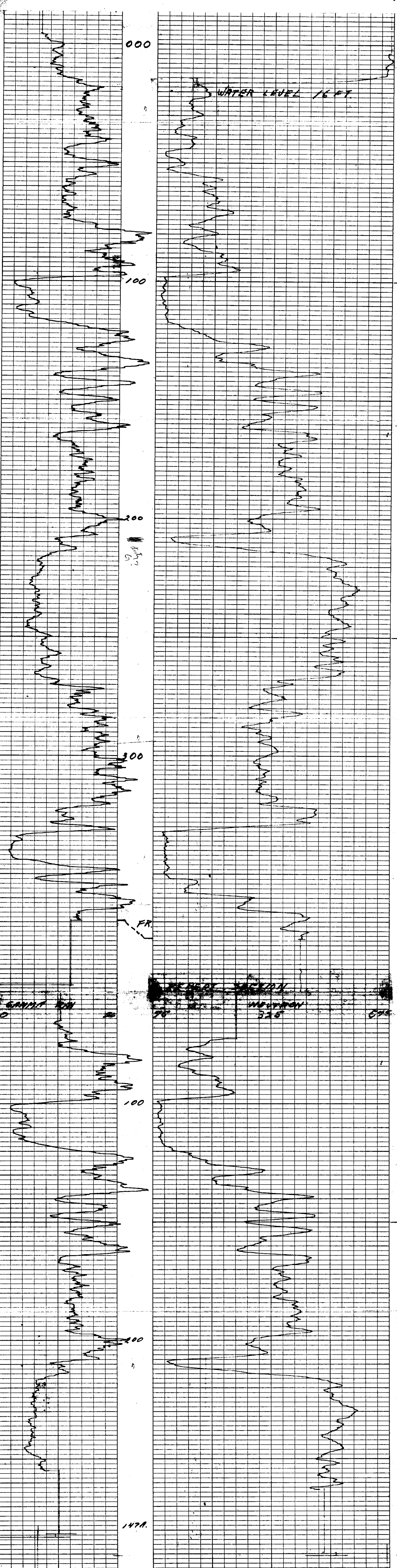
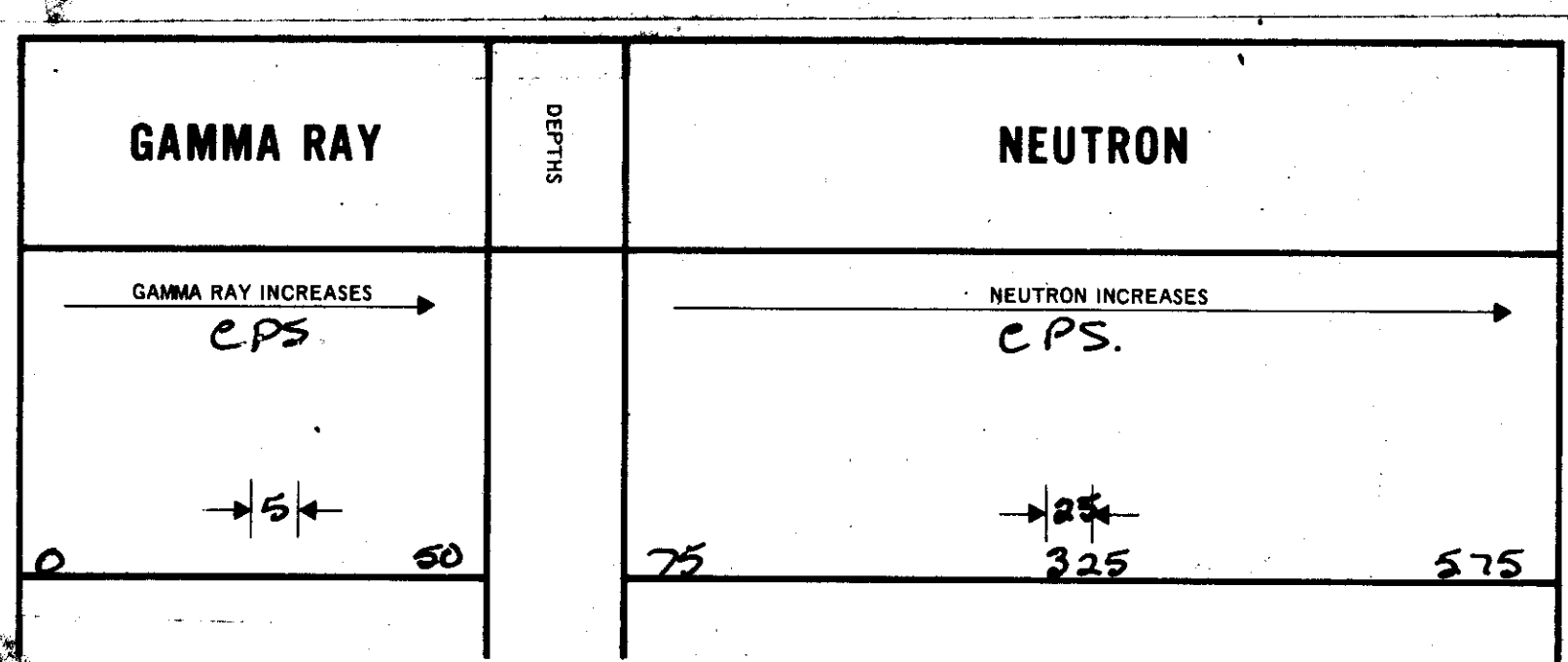
### EQUIPMENT DATA

GAMMA RAY				NEUTRON			
RUN NO.	<b>ONE</b>			RUN NO.	<b>ONE</b>		
TOOL MODEL NO.				LOG TYPE	<b>NEUTRON/NEUTRON</b>		
DIAMETER	<b>1 1/16</b>			TOOL MODEL NO.			
DETECTOR MODEL NO.				DIAMETER	<b>1 1/16</b>		
TYPE	<b>GEIGER</b>			DETECTOR MODEL NO.			
LENGTH	<b>18 INCH</b>			TYPE	<b>PROPORTIONAL</b>		
DISTANCE TO N. SOURCE	<b>8.55 FT.</b>			LENGTH	<b>6 INCH</b>		
GENERAL				SOURCE MODEL NO.	<b>MRE-N-SS-W</b>		
HOIST TRUCK NO.	<b>10</b>			SERIAL NO.	<b>598</b>		
INSTRUMENT TRUCK NO.				SPACING	<b>19 INCH.</b>		
TOOL SERIAL NO.	<b>C9N2704A65</b>			TYPE	<b>Rm B5</b>		
				STRENGTH	<b>6.94 x 10<sup>6</sup> N/S</b>		

### LOGGING DATA

GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	DEPTHS		SPEED FT/MIN	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
	FROM	TO									
<b>1</b>	<b>000</b>	<b>377</b>	<b>13</b>	<b>4</b>	<b>25</b>	<b>0</b>	<b>5 CPS.</b>	<b>4</b>	<b>5</b>	<b>3L</b>	<b>25 CPS.</b>
<b>2</b>	<b>100</b>	<b>250</b>	<b>13</b>	<b>4</b>	<b>25</b>	<b>0</b>	<b>5 CPS.</b>	<b>4</b>	<b>5</b>	<b>3L</b>	<b>25 CPS.</b>

REMARKS



# ROKE

GAMMA RAY NEUTRON LOG

K-Forms 70/3A-1

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO. COMPANY **FORDING CORP. CO. LTD.**

WELL **RH. 148**

LOCATION **SPRINGHILLS.**

FIELD **FORDING RIVER**

PROVINCE **B. C.**

Permit Data: Log Measured from **GROUND LEVEL.** Elev. **5066.2** K.B. \_\_\_\_\_  
Well Depths Measured from **GROUND LEVEL.** D.F. \_\_\_\_\_ G.L. \_\_\_\_\_

Run No. **ONE**

Date **4 APR. 70**

First Reading **553**

Last Reading **000**

Footage Logged **353**

Depth Reached **354**

Depth Driller **535**

Casing Rods \_\_\_\_\_

Casing Driller \_\_\_\_\_

Fluid Type **WATER**

Liquid Level **98 FT.**

Min. Diam. \_\_\_\_\_

Operating Time **2 HRS.**

Truck No. **10**

Recorded By **PETERSON** Witnessed By **PETERSON**

**312**

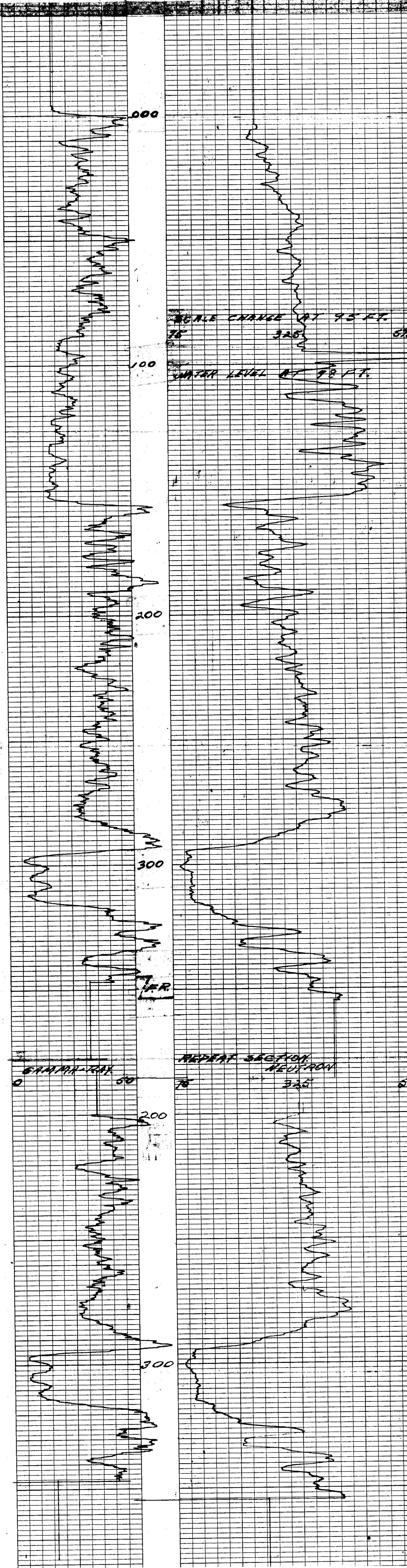
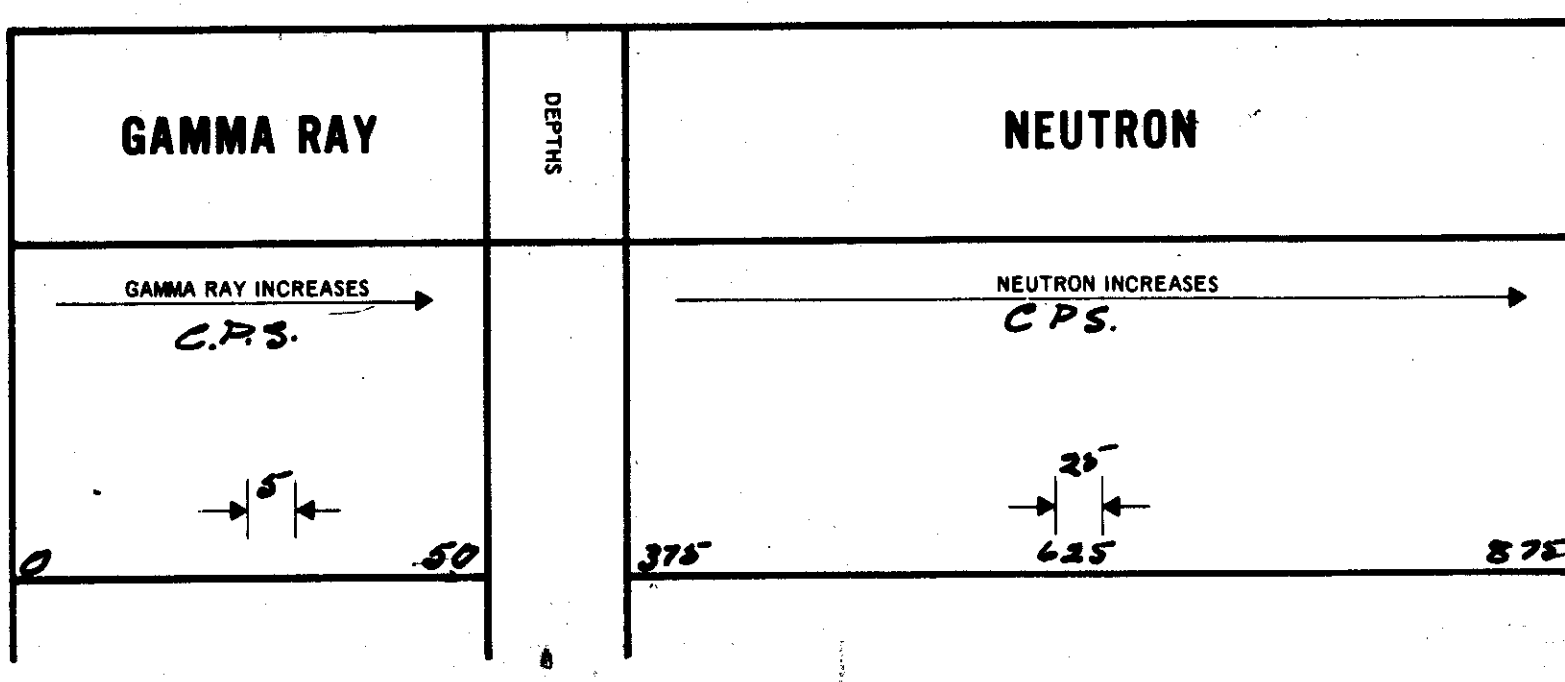
### EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	<b>ONE.</b>	RUN NO.	<b>ONE</b>
TOOL MODEL NO.		LOG TYPE	<b>NEUTRON/NEUTRON</b>
DIAMETER	<b>1 1/2</b>	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	<b>1 1/2</b>
TYPE	<b>GEIGER</b>	DETECTOR MODEL NO.	
LENGTH	<b>18 INCH</b>	TYPE	<b>PROPORTIONAL</b>
DISTANCE TO N. SOURCE	<b>8.55 FT</b>	LENGTH	<b>6 INCH</b>
		SOURCE MODEL NO.	<b>MRC-N-SS-W</b>
		SERIAL NO.	<b>598</b>
HOIST TRUCK NO.	<b>10</b>	SPACING	<b>19 INCH.</b>
INSTRUMENT TRUCK NO.		TYPE	<b>AmBe</b>
TOOL SERIAL NO.	<b>CGN2704A65</b>	STRENGTH	<b>6.94 x 10<sup>6</sup> N/S</b>

### LOGGING DATA

RUN NO.	GENERAL DEPTHS		SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	GAMMA RAY		NEUTRON		API N. UNITS PER LOG DIV.
	FROM	TO				ZERO DIV. L OR R	API G. R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	
<b>1</b>	<b>000</b>	<b>098</b>	<b>13</b>	<b>4</b>	<b>25</b>	<b>0</b>	<b>5 C.P.S.</b>	<b>4</b>	<b>5</b>	<b>156.25 CPS</b>
	<b>95</b>	<b>353</b>	<b>13</b>	<b>4</b>	<b>25</b>	<b>0</b>	<b>5 C.P.S.</b>	<b>4</b>	<b>5</b>	<b>34.25 CPS.</b>
	<b>200</b>	<b>353</b>	<b>(REPEAT SECTION - SCALED AS ABOVE)</b>							

REMARKS



# ROKE

GAMMA RAY NEUTRON LOG

K. FROST 2013A-1

OIL ENTERPRISES LTD. CALGARY, ALBERTA

COMPANY **FORDING COAL LIMITED.**

WELL **DH 119**

LOCATION **GREEN HILLS.**

FIELD **FORDING RIVER.**

PROVINCE **BRITISH COLUMBIA.**

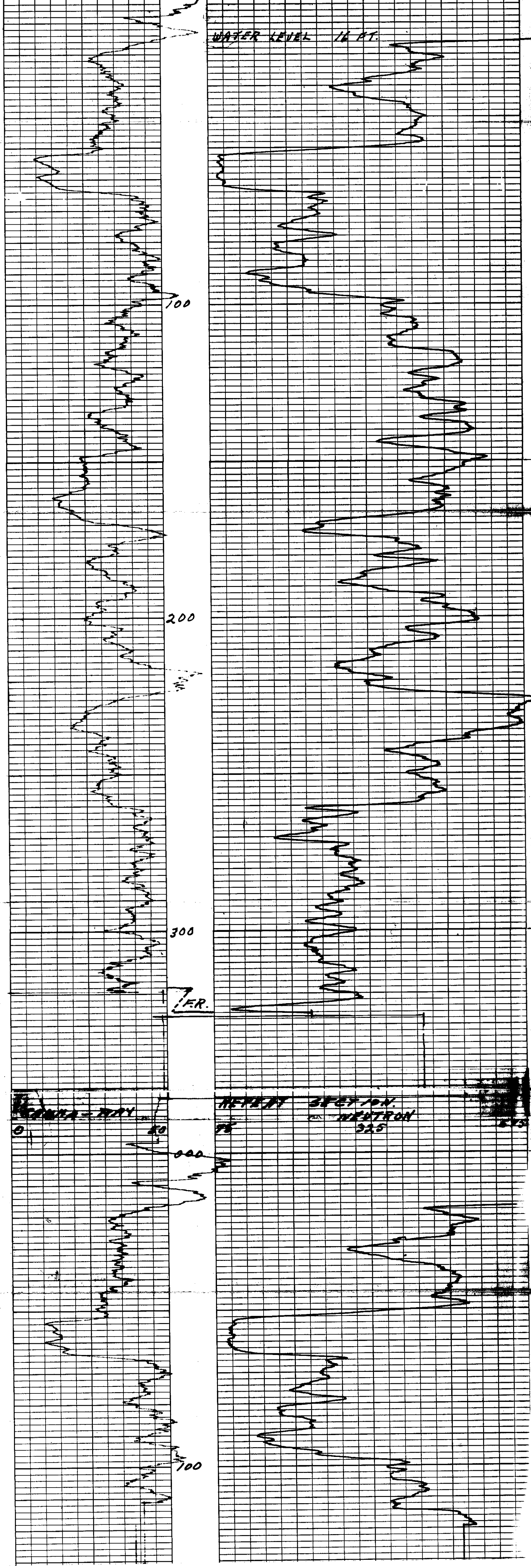
Permanent Datum: **GROUND LEVEL.** Elev. \_\_\_\_\_ K.B. \_\_\_\_\_  
 Log Measured from: **GROUND LEVEL.** Fl. Above Perm. Datum: \_\_\_\_\_ D.F. \_\_\_\_\_  
 Well Depths Measured from: **GROUND LEVEL.** G.L. \_\_\_\_\_

Run No.	<b>ONE.</b>
Date	<b>9 JULY 70</b>
First Reading	<b>326</b>
Last Reading	<b>000</b>
Footage Logged	<b>326</b>
Depth Reached	<b>327</b>
Depth Driller	
Casing Roker	
Casing Driller	
Fluid Type	<b>WATER</b>
Liquid Level	<b>16 FT.</b>
Min. Diam.	
Operating Time	<b>3 HOURS.</b>
Truck No.	<b>20</b>

GAMMA RAY		NEUTRON	
RUN NO.	<b>ONE</b>	RUN NO.	<b>ONE</b>
TOOL MODEL NO.		LOG TYPE	<b>NEUTRON/NEUTRON</b>
DIAMETER	<b>1 1/2</b>	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	<b>1 1/2</b>
TYPE	<b>GEIGER</b>	DETECTOR MODEL NO.	
LENGTH	<b>18 INCH</b>	TYPE	<b>PROPORTIONAL</b>
DISTANCE TO N. SOURCE	<b>8.55 FT</b>	LENGTH	<b>6 INCH</b>
		SOURCE MODEL NO.	<b>MRC-N-SS-W</b>
GENERAL		SERIAL NO.	<b>598</b>
HOIST TRUCK NO.	<b>20</b>	SPACING	<b>19 INCH.</b>
INSTRUMENT TRUCK NO.		TYPE	<b>AmBe</b>
TOOL SERIAL NO.	<b>CEN2704A65</b>	STRENGTH	<b>6.94 x 10<sup>6</sup> N/S</b>

GENERAL		GAMMA RAY				NEUTRON					
RUN NO.	DEPTHS		SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
	FROM	TO									
1	0	326	13	3	25	0	50 CPS.	3	5	3	25 CPS.

REMARKS



RECORDED BY **PETERSON** WITNESSED BY **PEARSON**

# ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

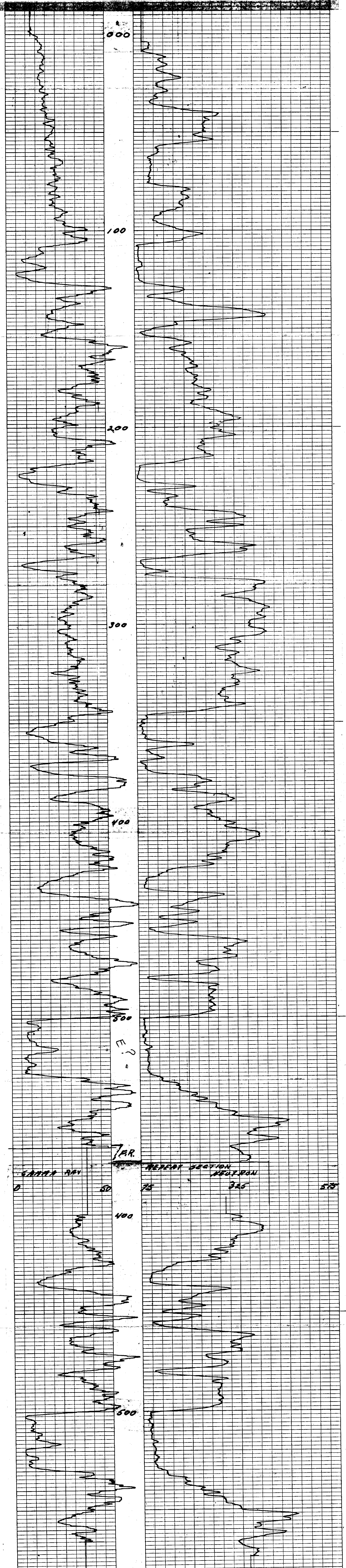
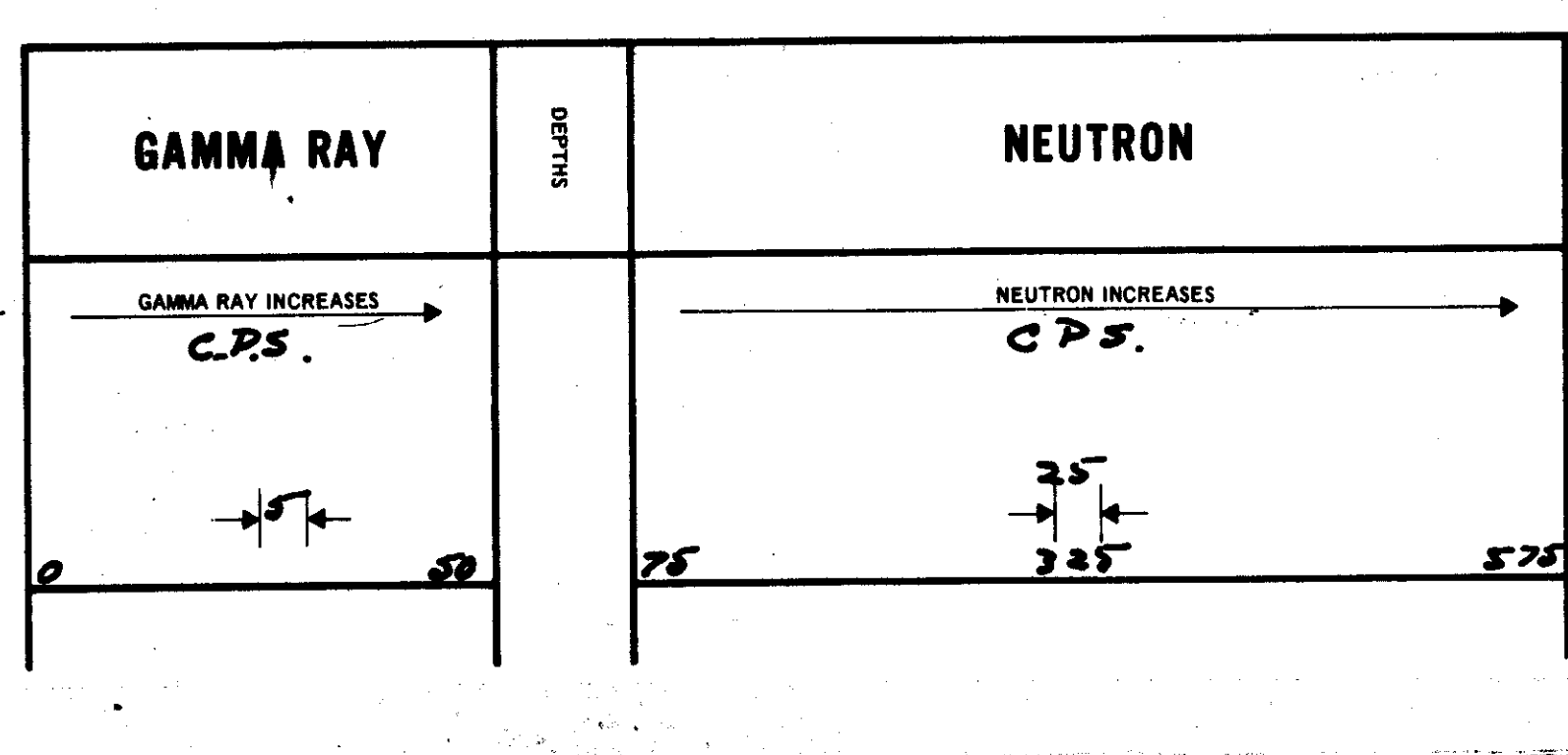
K-Formation 20(3)A-1

FILE NO.	COMPANY <b>PODDING CORP. CO. LTD.</b>
LSD	WELL <b>RH. 130</b>
SEC	LOCATION <b>GREEN HILLS.</b>
TRIP	RGE
RGE	FIELD <b>PARDING RIVER.</b>
M	PROVINCE <b>B. C.</b>
M	
Permanent Datum	Log Measured from <b>GROUND LEVEL.</b>
Well Depth Measured from <b>GROUND LEVEL.</b>	
Run No.	<b>ONE.</b>
First Reading	<b>573.</b>
Last Reading	<b>573.</b>
Footage Logged	<b>573</b>
Depth Reached	<b>573</b>
Drift/Diller	<b>600</b>
Casing Roller	
Casing Diameter	
Fluid Type	<b>WATER</b>
Liquid Level	<b>O.F.T.</b>
Min. Diam.	
Operating Time	<b>24 HRS.</b>
Truck No.	<b>10</b>
Recorded By <b>PETERSON</b>	Witnessed By <b>PETERSON</b>

EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	<b>ONE.</b>	RUN NO.	<b>ONE</b>
TOOL MODEL NO.		LOG TYPE	<b>NEUTRON/NEUTRON</b>
DIAMETER	<b>1 1/2</b>	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	<b>1 1/2</b>
TYPE	<b>GEIGER</b>	DETECTOR MODEL NO.	
LENGTH	<b>18 INCH</b>	TYPE	<b>PROPORTIONAL</b>
DISTANCE TO N. SOURCE	<b>8.55 FT</b>	LENGTH	<b>6 INCH</b>
		SOURCE MODEL NO.	<b>MRC-N-SS-W</b>
GENERAL		SERIAL NO.	<b>598</b>
HOIST TRUCK NO.	<b>10</b>	SPACING	<b>12 INCH.</b>
INSTRUMENT TRUCK NO.		TYPE	<b>AmBe</b>
TOOL SERIAL NO.	<b>CON 2704215</b>	STRENGTH	<b>6.94 x 10<sup>6</sup> N/S</b>

LOGGING DATA										
GENERAL		GAMMA RAY				NEUTRON				
RUN NO.	DEPTHS	SPEED	T.C.	SENS.	ZERO	API G.R. UNITS	T.C.	SENS.	ZERO	API N. UNITS
	FROM TO	FT/MIN	SEC.	SETTINGS	DIV. L OR R	PER LOG DIV.	SEC.	SETTINGS	DIV. L OR R	PER LOG DIV.
<b>1</b>	<b>000 573</b>	<b>12</b>	<b>4</b>	<b>25</b>	<b>0</b>	<b>5 C.P.S.</b>	<b>4</b>	<b>5</b>	<b>31</b>	<b>25 C.P.S.</b>
<b>400</b>	<b>573</b>	<b>(REPEAT SECTION - SCALE AS ABOVE.)</b>								



# ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

K-Beacon 7/2/71

FILE NO.	COMPANY	FORMING COAL CO. LTD.
WELL	WELL	RE 151
LOCATION	GREENHILLS	
FIELD	FORMING	
PROVINCE	BRITISH COLUMBIA	
Log Measured from	GROUND LEVEL	Fl. Above Perm. Datum
Well Depth Measured from	GROUND LEVEL	G.L.
Run No.	DATE	TIME
12	12 FEB 70	4:32
First Reading		0
Last Reading		482
Footage Logged		482
Depth Reached		482
Depth Dialer		480
Casing Hole		
Fluid Type		
Liquid Level		
Min. Diam.		
Operation Time		3 HOURS
Truck No.		10
Recorded By	Witnessed By	
PELTONSKI	PRANSIN	

312

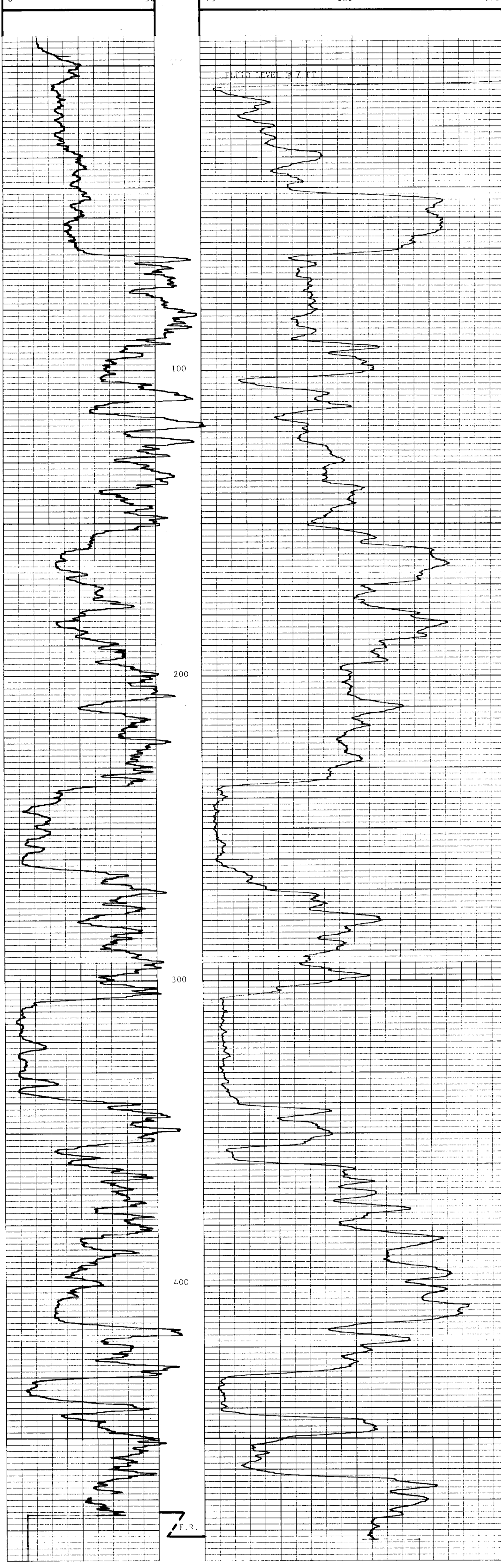
### EQUIPMENT DATA

GAMMA RAY				NEUTRON			
RUN NO.	ONE			RUN NO.	ONE		
TOOL MODEL NO.				LOG TYPE	NEUTRON/NEUTRON		
DIAMETER	1 11/16			TOOL MODEL NO.			
DETECTOR MODEL NO.				DIAMETER	1 11/16		
TYPE	GEIGER			DETECTOR MODEL NO.			
LENGTH	18 INCH			TYPE	PROPORTIONAL		
DISTANCE TO N SOURCE	3.5 FT			LENGTH	6 INCH		
				SOURCE MODEL NO.	NRG N-SS-N		
				SERIAL NO.	296		
HOIST TRUCK NO.	10			SPACING	19 INCH		
INSTRUMENT TRUCK NO.				TYPE	AUBO		
TOOL SERIAL NO.	CGN2714A55			STRENGTH	6.94 X 10 <sup>-5</sup> N/SEC		

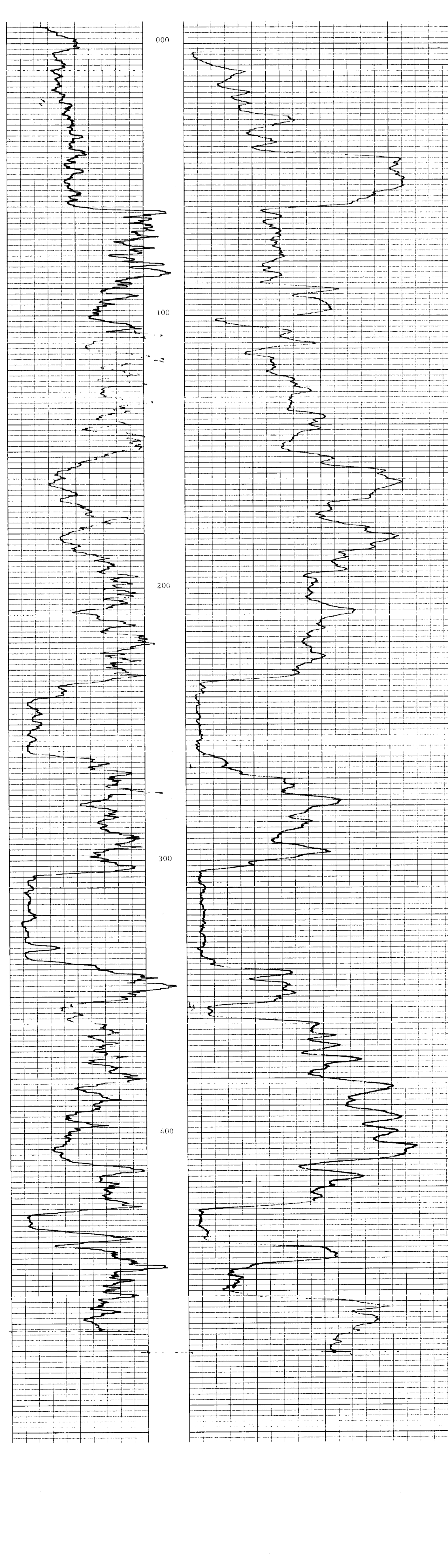
### LOGGING DATA

RUN NO.	GAMMA RAY			NEUTRON		
	DEPTHS	SPEED	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	000 TO 482	12 FT/MIN	3	25	0	25 cps

REMARKS



### REPEAT SECTION





# ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

K-560016 76/319-1

FILE NO. \_\_\_\_\_

COMPANY EDWARDS COAL CO. LTD.

WELL 152

LOCATION CREECH HILLS

RGE \_\_\_\_\_

FIELD EDWARDS RIVER

PROVINCE BRITISH COLUMBIA

Permanent Datum \_\_\_\_\_

Use Measured from GROUND LEVEL

Well Depth Measured from GROUND LEVEL

Run No. 045

Date 5 MAR 70

Fire Reading 446

Last Reading 446

Tooling Logged 446

Depth Reached 447

Depth Driller 475

Casing Note \_\_\_\_\_

Casing Driller \_\_\_\_\_

Fluid Type WATER

Liquid Level 00.0 FT.

Min. Diam. \_\_\_\_\_

Operating Time 3 HRS.

Truck No. 10

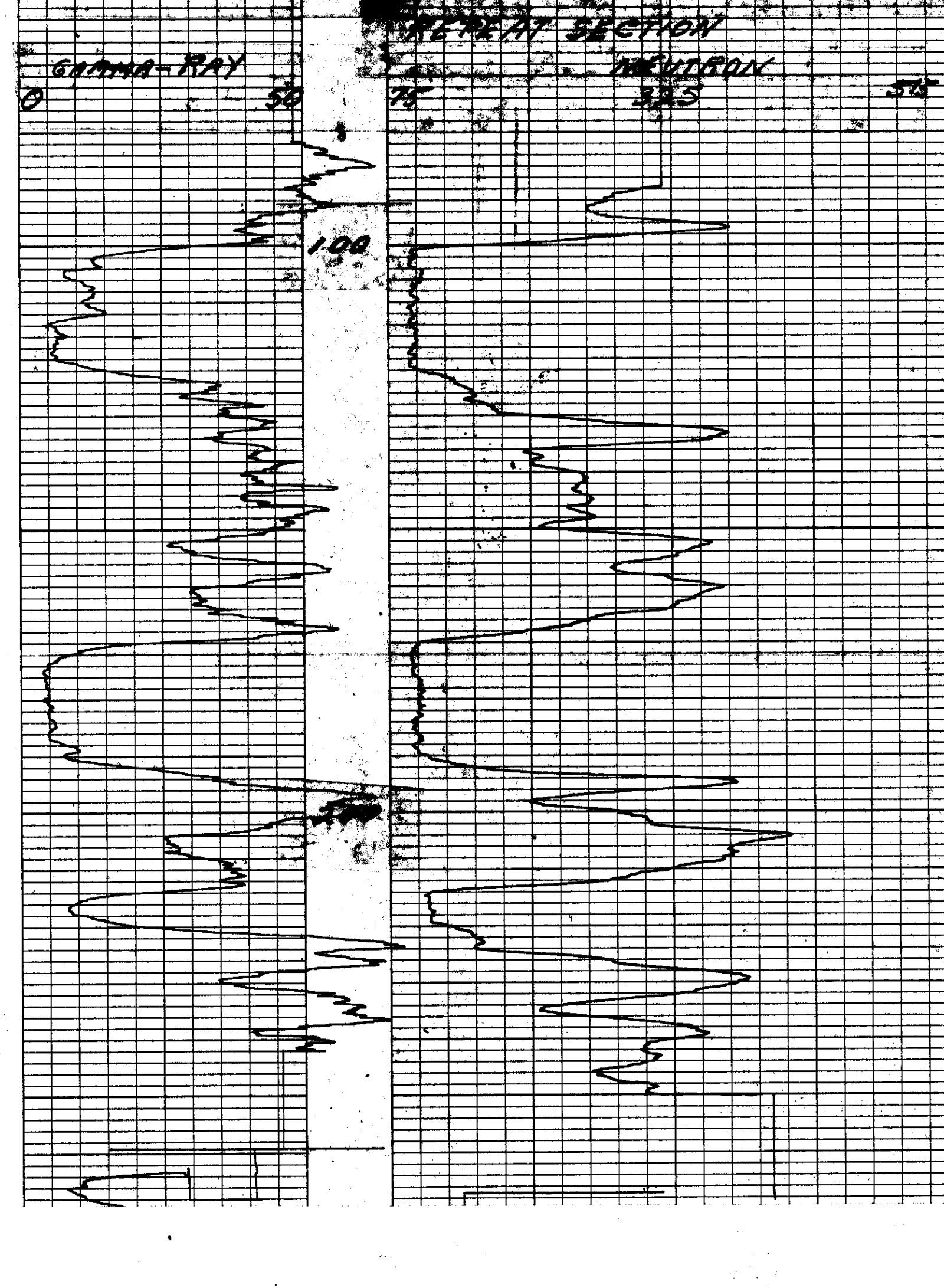
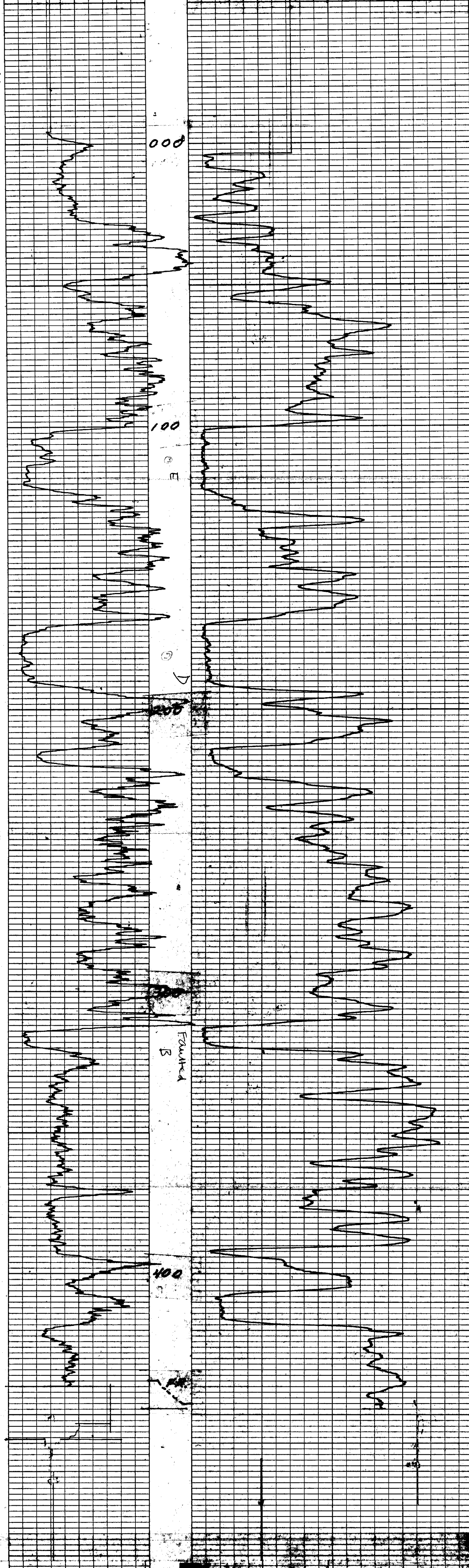
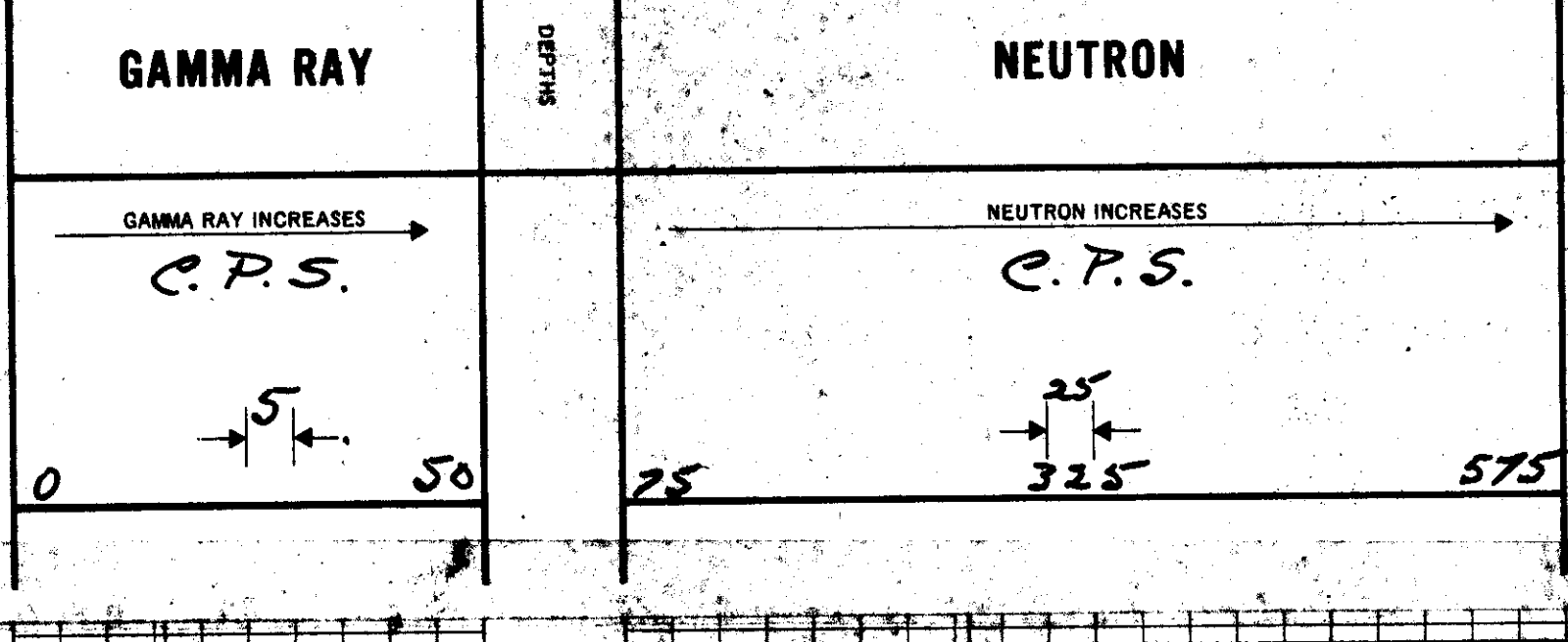
Recorded By DEERSON

Witnessed By BURRICHNIK

EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	<u>ONE</u>	RUN NO.	<u>ONE</u>
TOOL MODEL NO.	<u>1 1/2 INCHES</u>	LOG TYPE	<u>NEUTRON/NEUTRON</u>
DIAMETER	<u>1 1/2 INCHES</u>	TOOL MODEL NO.	<u>1 1/2 INCHES</u>
DETECTOR MODEL NO.	<u>6166</u>	DIAMETER	<u>1 1/2 INCHES</u>
TYPE	<u>15 INCHES</u>	DETECTOR MODEL NO.	<u>PROPORTIONAL</u>
LENGTH	<u>15 INCHES</u>	TYPE	<u>PROPORTIONAL</u>
DISTANCE TO N. SOURCE	<u>2.55 FEET</u>	LENGTH	<u>6 INCHES</u>
		SOURCE MODEL NO.	<u>MRC-N-35-W</u>
		SERIAL NO.	<u>599</u>
HOIST TRUCK NO.	<u>10</u>	SPACING	<u>19 INCHES</u>
INSTRUMENT TRUCK NO.		TYPE	<u>AMBE</u>
TOOL SERIAL NO.	<u>CGN2724065</u>	STRENGTH	<u>6.9410 N/S</u>

LOGGING DATA											
GAMMA RAY						NEUTRON					
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
<u>1</u>	<u>000</u>	<u>446</u>	<u>13</u>	<u>3</u>	<u>25</u>	<u>0</u>	<u>5 C.P.S.</u>	<u>3</u>	<u>5</u>	<u>31</u>	<u>25 C.P.S.</u>
<u>2</u>	<u>100</u>	<u>250</u>	<u>13</u>	<u>3</u>	<u>25</u>	<u>0</u>	<u>5 C.P.S.</u>	<u>3</u>	<u>5</u>	<u>31</u>	<u>25 C.P.S.</u>

REMARKS \_\_\_\_\_



K-FRONS 70(3A)-1

# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO. \_\_\_\_\_  
 COMPANY FORDING COAL CO.  
 WELL RH 153  
 LOCATION GREEN HILLS  
 FIELD FORDING RIVER  
 PROVINCE BRITISH COLUMBIA

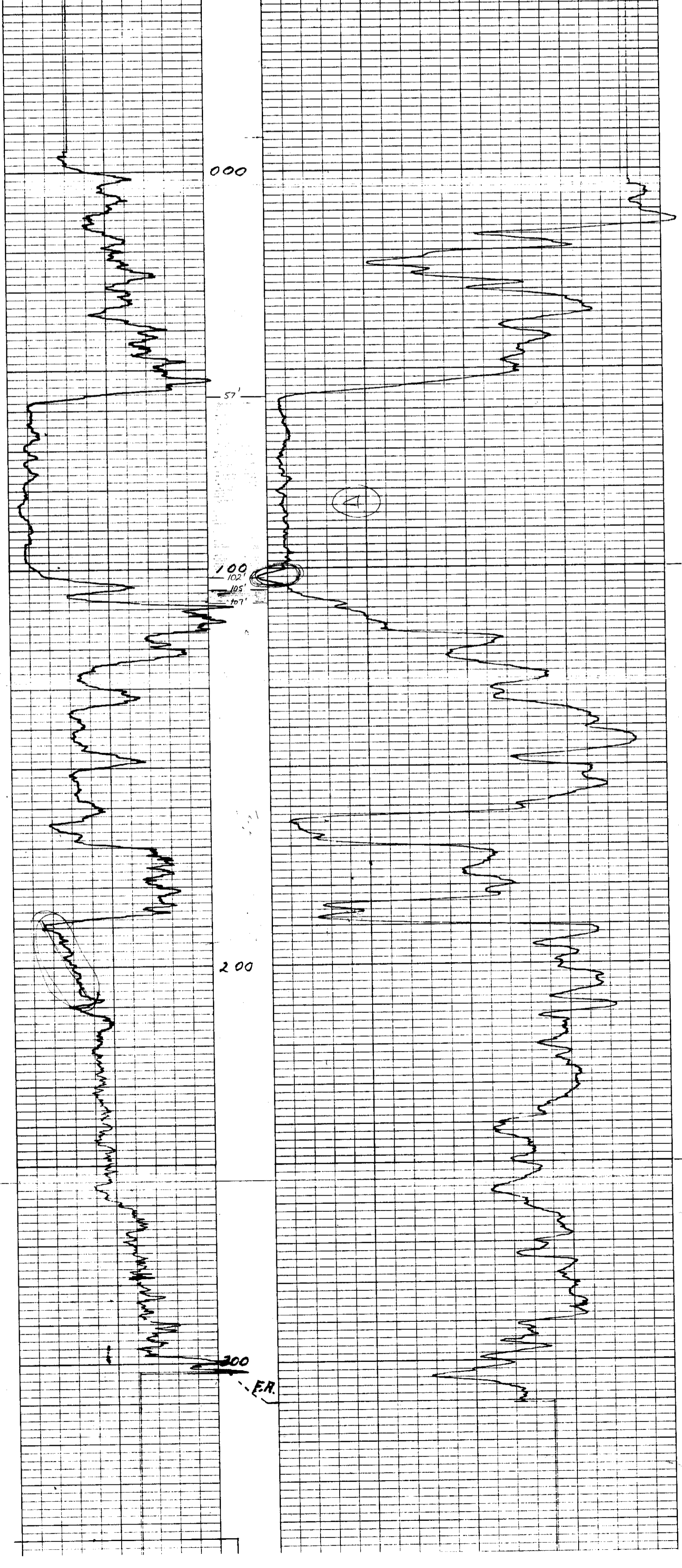
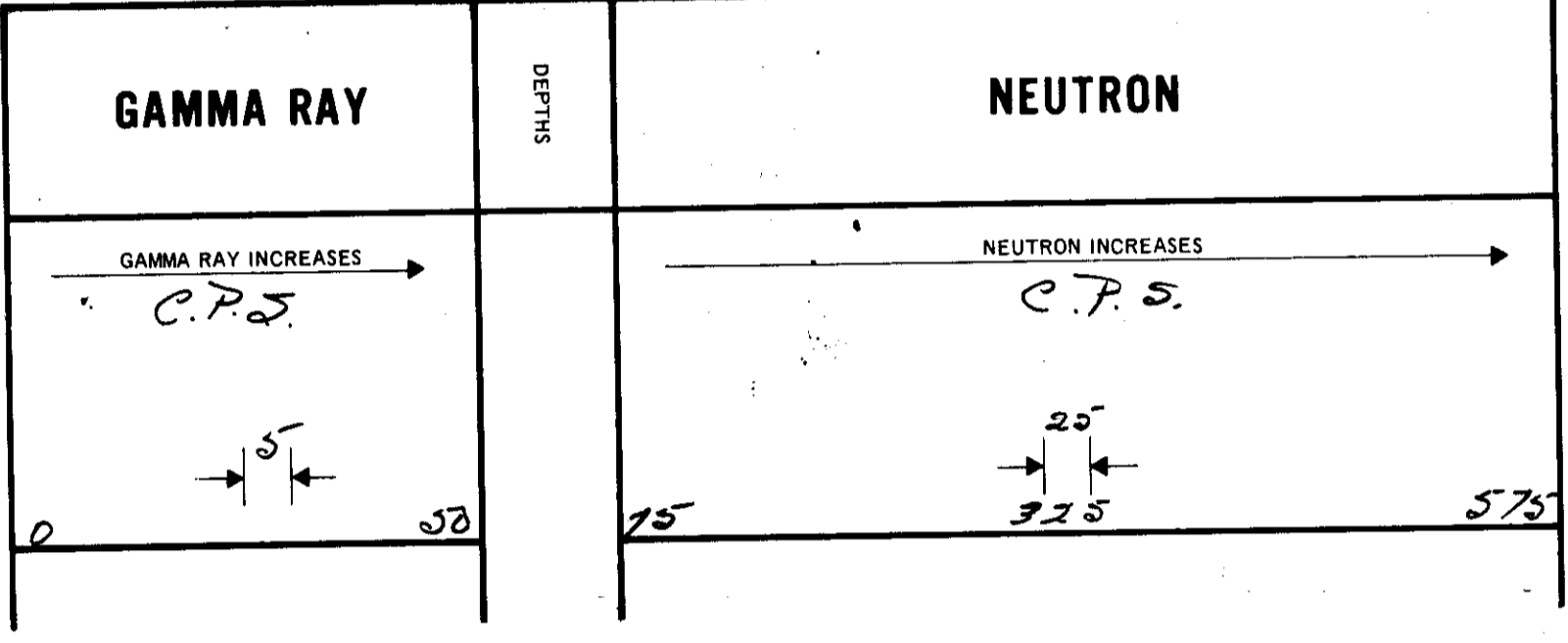
Permanent Datum GROUND LEVEL Elev. \_\_\_\_\_ K.B. \_\_\_\_\_  
 Log Measured from GROUND LEVEL Ft. Above Perm. Datum D.F. \_\_\_\_\_  
 Well Depths Measured from GROUND LEVEL G.L. \_\_\_\_\_

Run No. ONE  
 Date 19 MAR 70  
 First Reading 000  
 Last Reading 010  
 Footage Logged 010  
 Depth Reached 011  
 Depth Driller 330  
 Casing Roke \_\_\_\_\_  
 Casing Driller \_\_\_\_\_  
 Fluid Type WATER  
 Liquid Level 10 FT  
 Min. Diam. \_\_\_\_\_

Operating Time 2 HRS.  
 Truck No. 10

Recorded By PETERSON Witnessed By BUTRENCHUK

EQUIPMENT DATA										
GAMMA RAY			NEUTRON							
RUN NO.	<u>ONE</u>			RUN NO.	<u>ONE</u>					
TOOL MODEL NO.	<u>1 1/16</u>			LOG TYPE	<u>NEUTRON/NAUTRON</u>					
DIAMETER	<u>1 1/16</u>			TOOL MODEL NO.	<u>1 1/16</u>					
DETECTOR MODEL NO.	<u>GEIGER</u>			DIAMETER	<u>1 1/16</u>					
TYPE	<u>18 INCH</u>			DETECTOR MODEL NO.	<u>PROPORTIONAL</u>					
LENGTH	<u>8.55 FT.</u>			TYPE	<u>6 INCH</u>					
DISTANCE TO N. SOURCE				LENGTH	<u>MRC-N-35-W</u>					
				SOURCE MODEL NO.	<u>598</u>					
				SERIAL NO.	<u>19 INCHES</u>					
				SPACING	<u>AMBR</u>					
				TYPE	<u>6.94 X 10<sup>6</sup> N/S</u>					
				STRENGTH						
LOGGING DATA										
GENERAL		GAMMA RAY			NEUTRON					
RUN NO.	DEPTHS FROM TO	SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
<u>1</u>	<u>000 310</u>	<u>18</u>	<u>4</u>	<u>25</u>	<u>0</u>	<u>5 CPS.</u>	<u>4</u>	<u>5</u>	<u>3 L</u>	<u>25 CPS.</u>
REMARKS <u>NO REPEAT SECTION DUE TO BAD HOLE CONDITION.</u>										



# ROKE

GAMMA RAY NEUTRON LOG

K-1-100106 26(3)A-1

OIL ENTERPRISES LTD. CALGARY, ALBERTA

COMPANY: **FORBING CONL CO. LTD.**

WELL: **151**

LOCATION: **GREENHILLS.**

RGE: **FORBING RIVER.**

FIELD: **FORBING RIVER.**

PROVINCE: **BRITISH COLUMBIA**

Permitment Data: **GROUND LEVEL** Elev. \_\_\_\_\_  
 Log Measured from: **GROUND LEVEL** D.F. \_\_\_\_\_  
 Well Depths Measured from: **GROUND LEVEL** G.L. \_\_\_\_\_

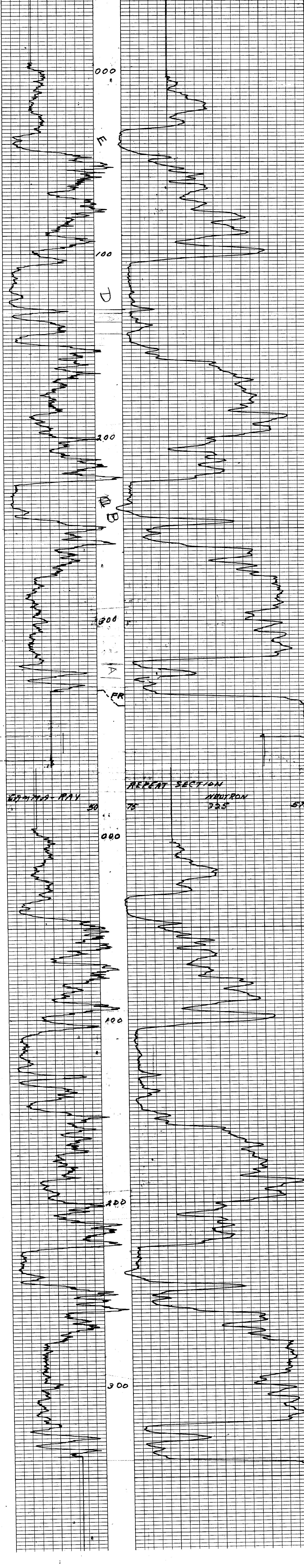
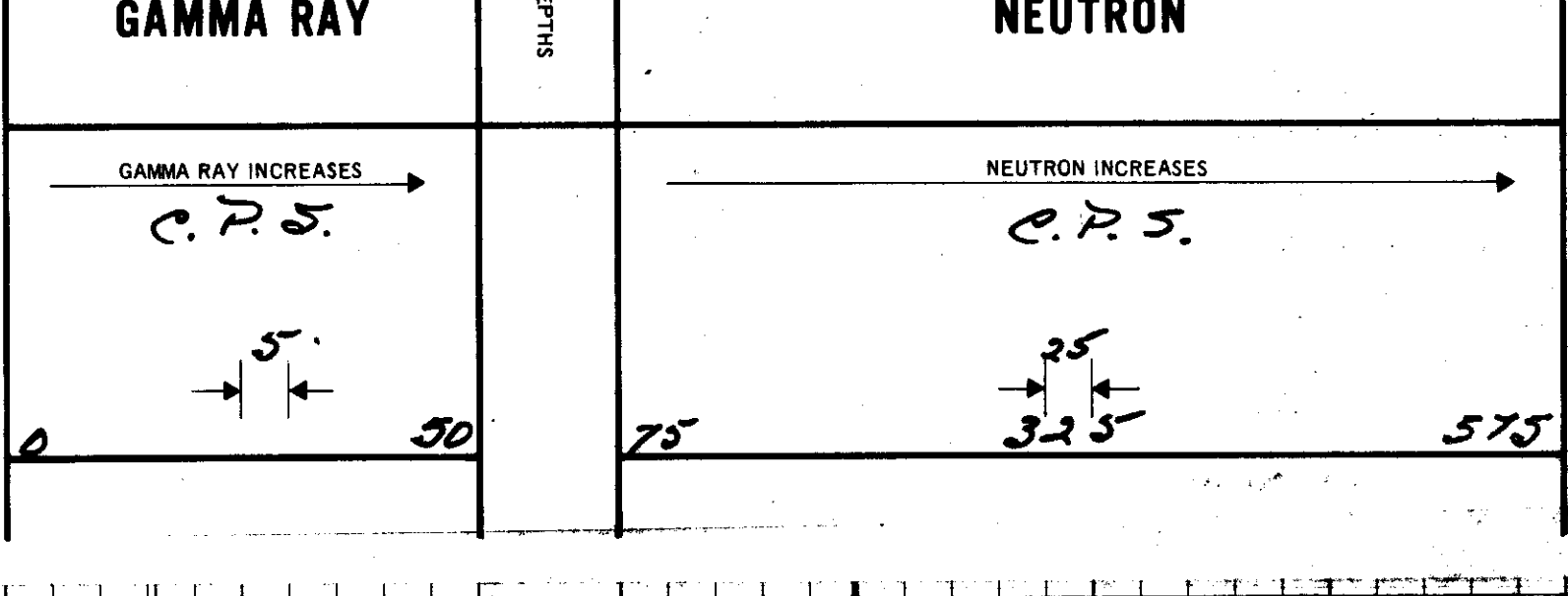
Run No.	<b>ONE</b>
Date	<b>5 MAR 1960</b>
First Reading	<b>346</b>
Last Reading	<b>600</b>
Footage Logged	<b>346</b>
Depth Reached	<b>347</b>
Depth Driller	<b>355</b>
Casing Role	<b>WATER</b>
Casing Driller	
Fluid Type	
Liquid Level	
Min. Diam.	
Operating Time	<b>2 HRS.</b>
Truck No.	<b>10</b>
Recorded By	<b>TEETERSON</b>
Witnessed By	<b>R. TRECHUK.</b>

**312**

EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	<b>ONE</b>	RUN NO.	<b>ONE</b>
TOOL MODEL NO.		LOG TYPE	<b>NEUTRON/NEUTRON</b>
DIAMETER	<b>1 7/8 INCHES.</b>	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	<b>1 3/4 INCHES.</b>
TYPE	<b>GEIGER</b>	DETECTOR MODEL NO.	
LENGTH	<b>18 INCHES</b>	TYPE	<b>PROPORTIONAL.</b>
DISTANCE TO N. SOURCE	<b>9.55 FEET.</b>	LENGTH	<b>6 INCHES.</b>
		SOURCE MODEL NO.	<b>MRE-N-SS-W.</b>
		SERIAL NO.	<b>588</b>
HOIST TRUCK NO.	<b>10</b>	SPACING	<b>19 INCHES.</b>
INSTRUMENT TRUCK NO.		TYPE	<b>2M BE.</b>
TOOL SERIAL NO.	<b>CGN274460</b>	STRENGTH	<b>6.94 X 10<sup>6</sup> N/S.</b>

LOGGING DATA														
GENERAL					GAMMA RAY					NEUTRON				
RUN NO.	FROM	TO	SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.			
1	000	346	13	3	25	0	5 CPS.	3	5	3L	25 CPS.			
2	000	346	13	3	25	0	5 CPS.	3	5	3L	25 CPS.			

REMARKS



# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

K-Foxon-20(3)A-1

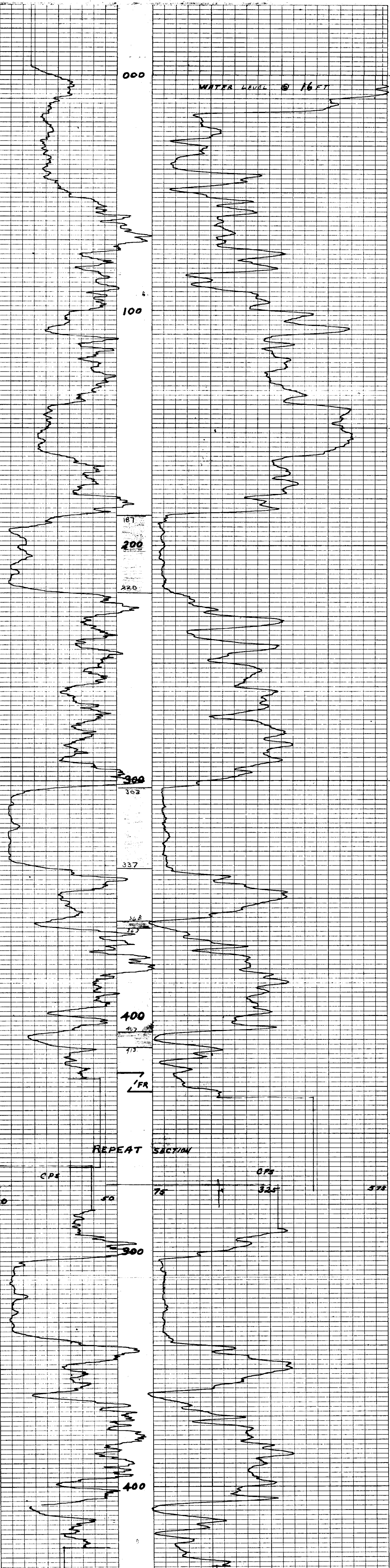
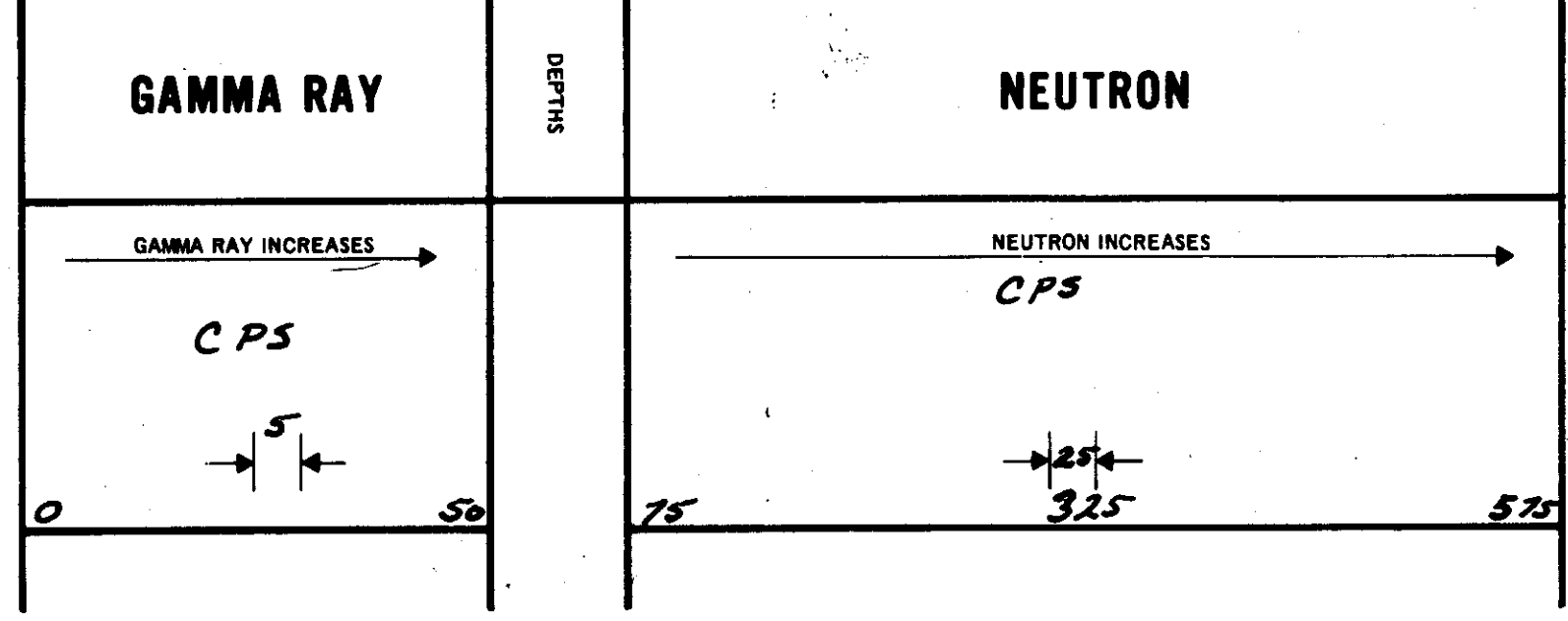
FILE NO.	COMPANY	WELL	LOCATION	FIELD	PROVINCE
	FORBES COAL CO LTD	RH 155	GREENWILLS	FORDING RIVER	BRITISH COLUMBIA
LSD					
SIC					
TWP					
RGE					
M					
Log Measured from	GROUND LABEL	Elev.			
Well Depth Measured from	GROUND LABEL	Fl. Above Perm. Datum			
Run No.	ONE				
Date	25 MAR 70				
First Reading	432				
Last Reading	0				
Footage Logged	432				
Depth Reached	432				
Depth Driller	445				
Casing Roles					
Casing Driller					
Fluid Type	WATER				
Liquid Level	16 FT				
Min. Diam.					
Operating Time	2 HRS				
Truck No.					
Recorded By	PETERSON	Witnessed By	PETERSON		

**312**

EQUIPMENT DATA					
GAMMA RAY			NEUTRON		
RUN NO.	ONE			RUN NO.	ONE
TOOL MODEL NO.				LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/2			TOOL MODEL NO.	
DETECTOR MODEL NO.				DIAMETER	1 1/2
TYPE	GEIGER			DETECTOR MODEL NO.	
LENGTH	18 INCH			TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	8.55 FT			LENGTH	6 INCH
				SOURCE MODEL NO.	MRC-N-SS-W
				SERIAL NO.	598
HOIST TRUCK NO.	10			SPACING	19 INCH
INSTRUMENT TRUCK NO.				TYPE	AmBe
TOOL SERIAL NO.	CEN 2704A 65			STRENGTH	6.94 x 10 <sup>6</sup> N/S

LOGGING DATA											
GENERAL			GAMMA RAY				NEUTRON				
RUN NO.	DEPTHS FROM	TO	SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	0	432	13	4	25	0	5 CPS	4	5	36	25 CPS
REPEAT SECTION			300-432				AS ABOVE				



K-FRONT-76(3)A-1

# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO. COMPANY **PARSONS CORP. CO. LTD.**

WELL **RH 152**

LOCATION **SHERBROOK HILLS**

FIELD **FORBES RIVER**

PROVINCE **B.C.**

Permanent Datum \_\_\_\_\_ Elev. \_\_\_\_\_  
 Log Measured from **CROWN LEVEL**, Ft. Above Perm. Datum  
 Wall Depths Measured from **GROUND LEVEL**, G.L. \_\_\_\_\_

Run No.	<b>ONE</b>
Date	<b>23 APR 1950</b>
First Reading	<b>223</b>
Last Reading	<b>000</b>
Footage Logged	<b>223</b>
Depth Reached	<b>324</b>
Depth Driller	<b>505</b>
Casing Roller	
Casing Driller	
Fluid Type	<b>WATER</b>
Liquid Level	<b>75 FT.</b>
Mfn. Diam.	
Operating Time	<b>2 HRS.</b>
Truck No.	<b>10</b>
Recorded By	<b>REITERSON</b>
Witnessed By	<b>PEARSON</b>

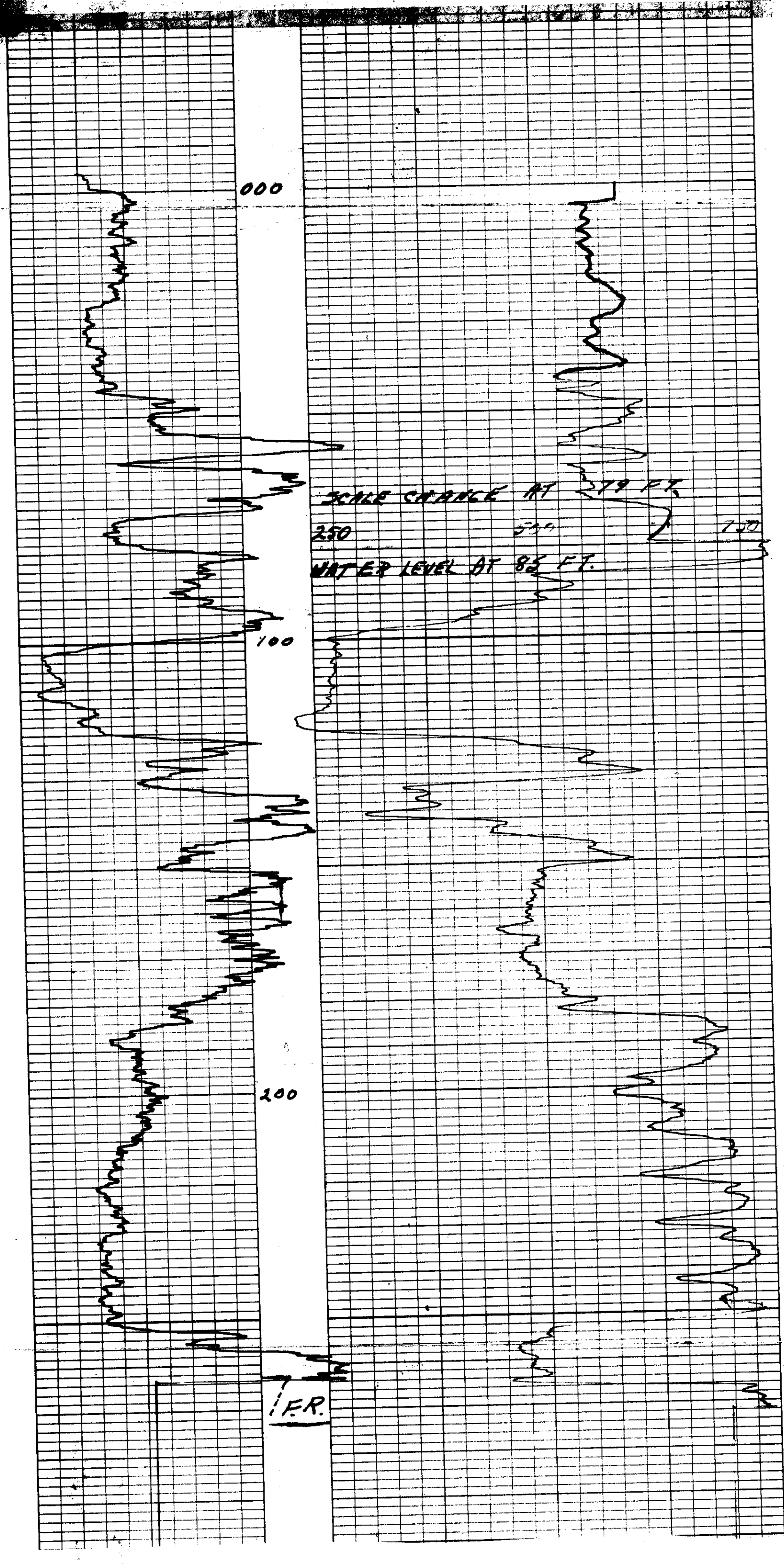
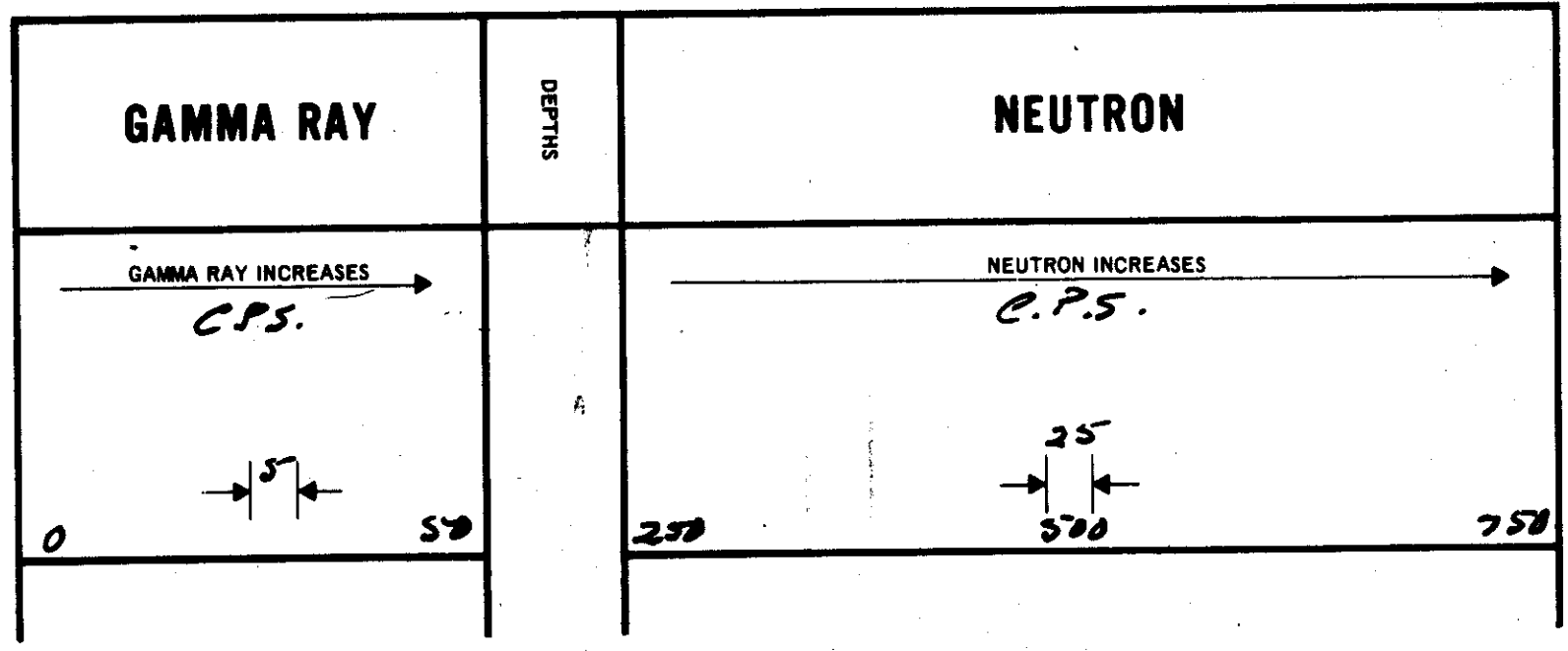
# 312

EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	<b>ONE</b>	RUN NO.	<b>ONE</b>
TOOL MODEL NO.		LOG TYPE	<b>NEUTRON/NEUTRON</b>
DIAMETER	<b>1 1/2</b>	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	<b>1 1/2</b>
TYPE	<b>GEIGER</b>	DETECTOR MODEL NO.	
LENGTH	<b>18 INCH</b>	TYPE	<b>PROPORTIONAL</b>
DISTANCE TO N. SOURCE	<b>8.55 FT</b>	LENGTH	<b>6 INCH</b>
		SOURCE MODEL NO.	<b>MRC-N-SS-W</b>
		SERIAL NO.	<b>598</b>
HOIST TRUCK NO.	<b>10</b>	SPACING	<b>18 INCH.</b>
INSTRUMENT TRUCK NO.		TYPE	<b>AmBe</b>
TOOL SERIAL NO.	<b>662704065</b>	STRENGTH	<b>6.94 x 10<sup>6</sup> N/S</b>

LOGGING DATA											
RUN NO.	DEPTHS		SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	GAMMA RAY			NEUTRON		
	FROM	TO				ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	000	085	12	4	35	0	5 CPS	4	5	106	35 CPS.
	085	273	13	4	35	0	5 CPS	4	5	34	25 CPS.

REMARKS  
**NO REPEAT RUN DUE TO BAD HOLE CONDITIONS.**



R-Formation 70(3)A-1

# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO. COMPANY **FORBING COAL CO. LTD**

WELL **RH-57A**

LOCATION **GREENHILLS**

FIELD **FORBING RIVER**

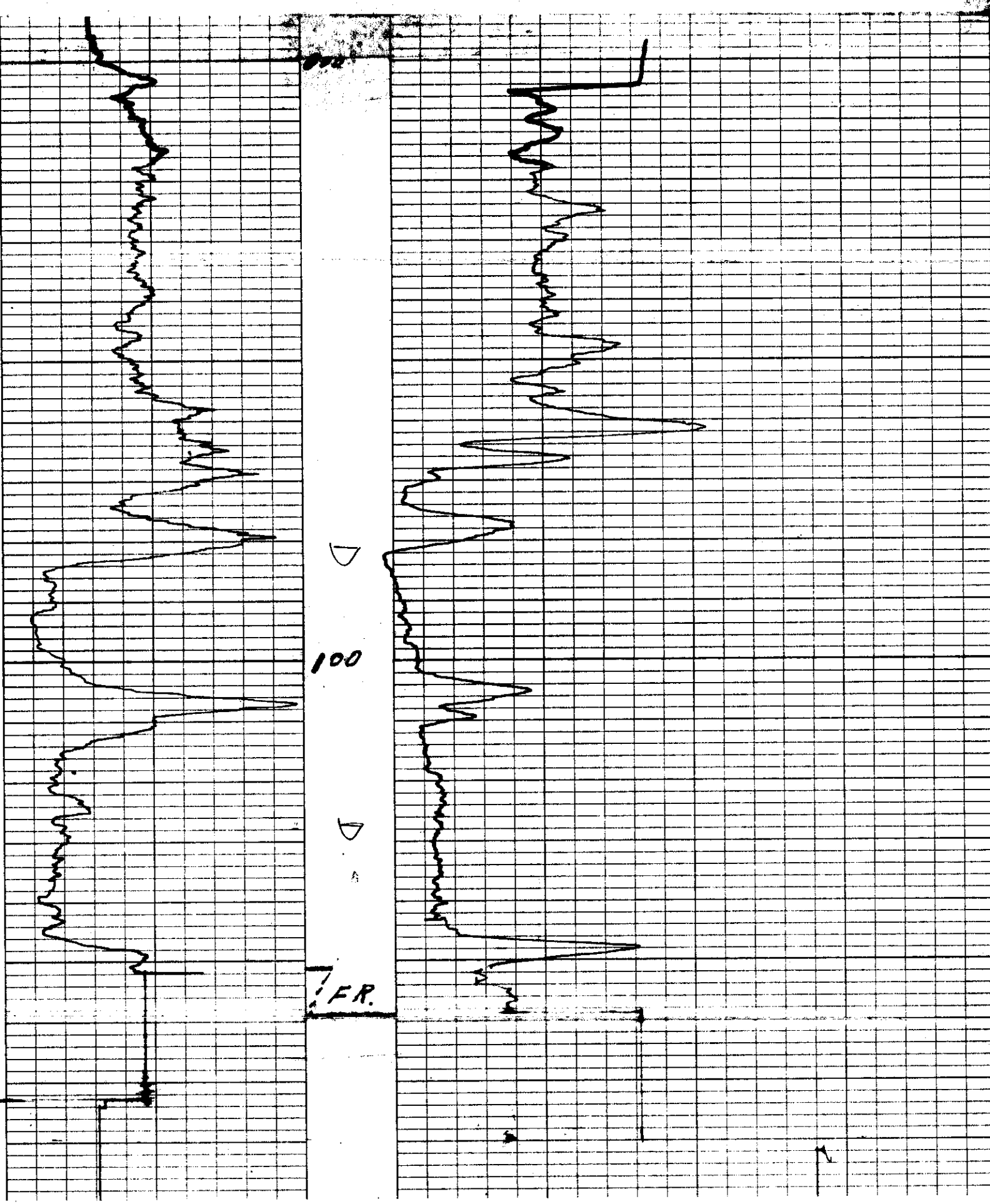
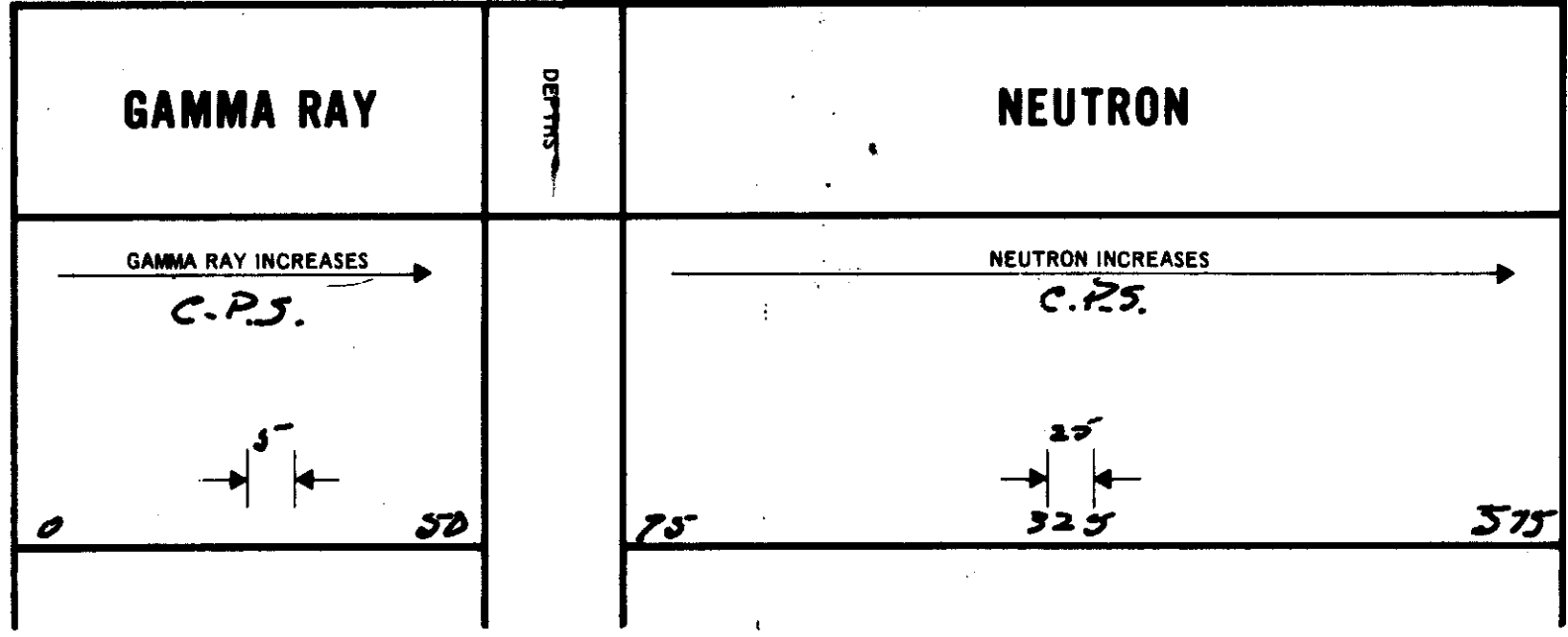
PROVINCE **B.C.**

Permanent Datum \_\_\_\_\_ Elev. \_\_\_\_\_  
 Log Measured from **GROUND LEVEL** Ft. Above Perm. Datum \_\_\_\_\_  
 Well Depths Measured from **GROUND LEVEL** G.L. \_\_\_\_\_

Run No.	<b>ONE</b>
Date	<b>21 APR 70</b>
First Reading	<b>15.9</b>
Last Reading	<b>00.0</b>
Footage Logged	<b>159</b>
Depth Reached	<b>160</b>
Depth Driller	<b>2570</b>
Casing Roke	<b>---</b>
Casing Driller	<b>---</b>
Fluid Type	<b>WATER</b>
Liquid Level	<b>4 FT.</b>
Mfr. Diam.	<b>---</b>
Operating Time	<b>1 1/2 HRS</b>
Truck No.	<b>10</b>

**302**

EQUIPMENT DATA										
GAMMA RAY			NEUTRON							
RUN NO.	<b>ONE</b>			RUN NO.	<b>ONE</b>					
TOOL MODEL NO.				LOG TYPE	<b>NEUTRON/NEUTRON</b>					
DIAMETER	<b>1 1/2</b>			TOOL MODEL NO.						
DETECTOR MODEL NO.				DIAMETER	<b>1 1/2</b>					
TYPE	<b>GEIGER</b>			DETECTOR MODEL NO.						
LENGTH	<b>18 INCH</b>			TYPE	<b>PROPORTIONAL</b>					
DISTANCE TO N. SOURCE	<b>8.55 FT</b>			LENGTH	<b>6 INCH</b>					
				SOURCE MODEL NO.	<b>MRC-N-SS-W</b>					
				SERIAL NO.	<b>598</b>					
				SPACING	<b>19 INCH.</b>					
				TYPE	<b>AmBe</b>					
				STRENGTH	<b>6.94 x 10<sup>6</sup> N/S</b>					
LOGGING DATA										
GENERAL		GAMMA RAY			NEUTRON					
RUN NO.	DEPTHS FROM TO	SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
<b>1</b>	<b>000 159</b>	<b>13</b>	<b>4</b>	<b>25</b>	<b>0</b>	<b>5 CPS</b>	<b>4</b>	<b>5</b>	<b>32</b>	<b>25 CPS</b>
REMARKS										
<b>NO REPEAT RUN DUE TO BAD HOLE CONDITIONS.</b>										



K-Form 70(3)A-1

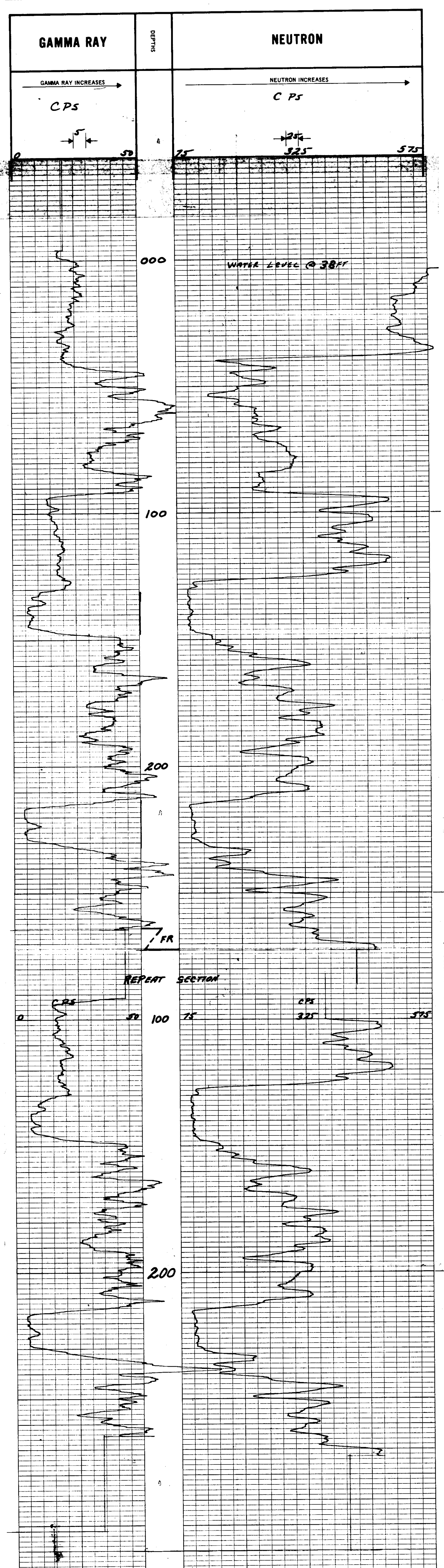
# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	COMPANY <b>EARDING COAL CO LTD</b>
LSD	WELL <b>RH 160</b>
SEC	LOCATION <b>GREEN HILLS</b>
TWP	FIELD <b>EARDING RIVER</b>
RGE	PROVINCE <b>BRITISH COLUMBIA</b>
W	
M	
Permanent Datum	<b>GROUND LEVEL</b> Elev. _____
Log Measured from	<b>GROUND LEVEL</b> Ft. Above Perm. Datum _____
Well Depths Measured from	
Run No.	<b>ONE</b>
Date	<b>25 MAR 70</b>
First Reading	<b>272</b>
Last Reading	<b>0</b>
Footage Logged	<b>272</b>
Depth Reached	<b>272</b>
Depth Driller	
Casing Hole	
Casing Driller	
Fluid Type	<b>38 FT</b>
Liquid Level	
Min. Diam.	
Operating Time	<b>2 HRS</b>
Truck No.	<b>10</b>
Recorded By	<b>PATSON</b>
Witnessed By	<b>PERSON</b>

EQUIPMENT DATA											
GAMMA RAY		NEUTRON									
RUN NO.	<b>ONE</b>	RUN NO.	<b>ONE</b>								
TOOL MODEL NO.		LOG TYPE	<b>NEUTRON/NEUTRON</b>								
DIAMETER	<b>1 1/2</b>	TOOL MODEL NO.									
DETECTOR MODEL NO.		DIAMETER	<b>1 1/2</b>								
TYPE	<b>GEIGER</b>	DETECTOR MODEL NO.									
LENGTH	<b>18 INCH</b>	TYPE	<b>PROPORTIONAL</b>								
DISTANCE TO N. SOURCE	<b>8.55 FT</b>	LENGTH	<b>6 INCH</b>								
		SOURCE MODEL NO.	<b>MRC-N-SS-W</b>								
		SERIAL NO.	<b>598</b>								
		SPACING	<b>19 INCH</b>								
		TYPE	<b>AmBe</b>								
		STRENGTH	<b>6.94 x 10<sup>6</sup> N/S</b>								
LOGGING DATA											
GENERAL		GAMMA RAY		NEUTRON							
RUN NO.	DEPTHS	SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.	
<b>1</b>	<b>0</b>	<b>272</b>	<b>13</b>	<b>4</b>	<b>25</b>	<b>0</b>	<b>5 CPS</b>	<b>13</b>	<b>5</b>	<b>3L</b>	<b>25 CPS</b>
	<b>100</b>	<b>272</b>	<b>REPEAT SECTION AS ABOVE</b>								
REMARKS											



# ROKE

GAMMA RAY NEUTRON LOG

K-FRANKS 70(3)A-1

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO. COMPANY **FORDING COAL LIMITED**

WELL **PH 161**

LOCATION **GREENHILLS**

FIELD **FORDING RIVER**

PROVINCE **BRITISH COLUMBIA**

Permanent Datum **GROUND LEVEL** Elev. \_\_\_\_\_  
 Log Measured from **GROUND LEVEL** Ft. Above Perm. Datum \_\_\_\_\_  
 Well Depths Measured from \_\_\_\_\_ C.L. \_\_\_\_\_

Run No. **ONE**

Date **3 JULY 70**

First Reading **184**

Last Reading **000**

Footage Logged **184**

Depth Reached **185**

Depth Driller **300**

Casing Driller \_\_\_\_\_

Fluid Type **WATER**

Min. Diam. **3 1/2"**

**312**

Operating Time **3 HRS.**

Truck No. **20**

Recorded By **PETERSON** Witnessed By **DEANSON**

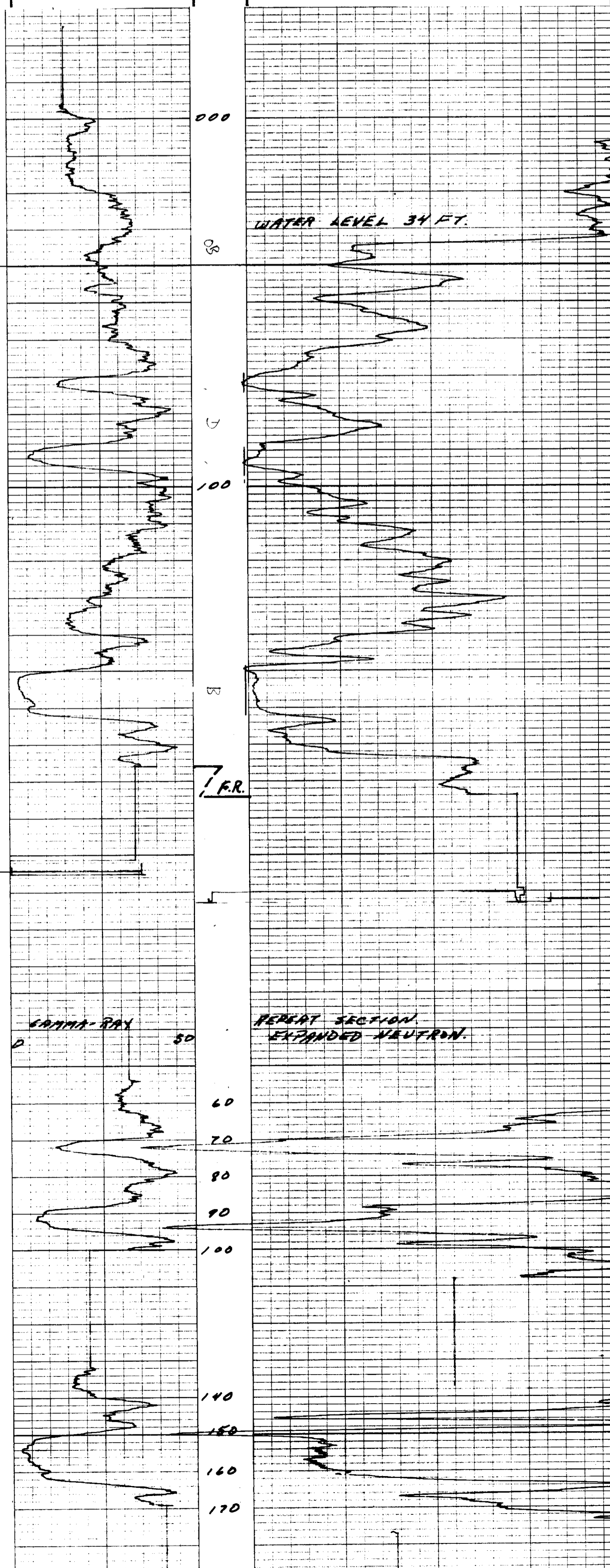
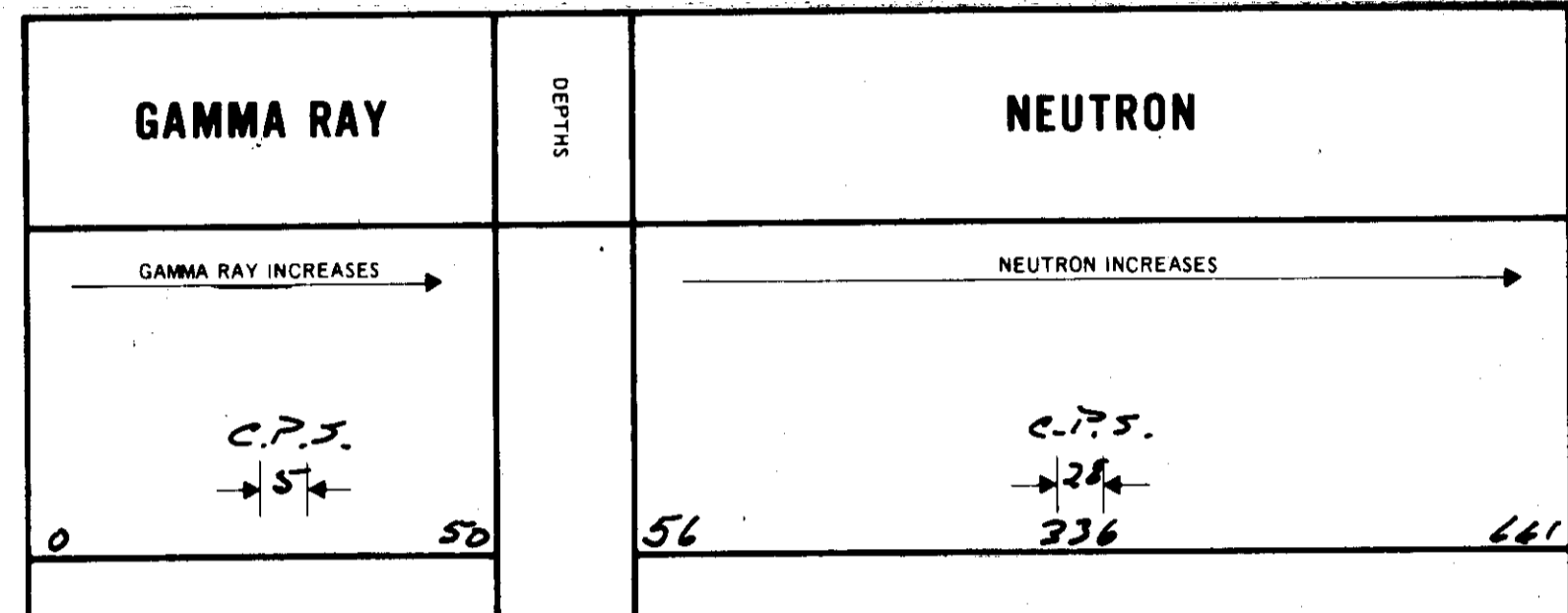
### EQUIPMENT DATA

GAMMA RAY				NEUTRON			
RUN NO.	<b>ONE</b>			RUN NO.	<b>ONE</b>		
TOOL MODEL NO.	<b>1 1/2</b>			LOG TYPE	<b>NEUTRON/NEUTRON</b>		
DIAMETER	<b>1 1/2</b>			TOOL MODEL NO.	<b>1 1/2</b>		
DETECTOR MODEL NO.	<b>GEIGER</b>			DIAMETER	<b>1 1/2</b>		
TYPE	<b>GEIGER</b>			DETECTOR MODEL NO.	<b>PROPORTIONAL</b>		
LENGTH	<b>18 INCH</b>			TYPE	<b>6 INCH</b>		
DISTANCE TO N. SOURCE	<b>8.55 FT</b>			LENGTH	<b>MRC-N-SS-W</b>		
GENERAL				SOURCE MODEL NO.	<b>19 INCH.</b>		
HOIST TRUCK NO.	<b>20</b>			SERIAL NO.	<b>AmBe</b>		
INSTRUMENT TRUCK NO.	<b>CON270465</b>			SPACING	<b>6.94 x 10<sup>6</sup> N/S</b>		
TOOL SERIAL NO.				TYPE			
				STRENGTH			

### LOGGING DATA

RUN NO.	GENERAL		SPEED FT/MIN	T.C. SEC.	GAMMA RAY			NEUTRON			
	FROM	TO			SENS. SETTINGS	ZERO DIV. L OR R	API GR UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	100	184	11	4	25	0	5 CPS.	4	4	24	28 CPS.
*	60	100	11	4	25	0	5 CPS	4	10	50L	
*	140	170	11	4	25	0	5 CPS	4	10	50L	

REMARKS  
 \* REPEAT SECTIONS. (EXPANDED NEUTRON 10:1 RATIO)  
 GAMMA-RAY - SCALED AS ABOVE. COVER ORIGINAL LOG.  
 NEUTRON - LOGGED WITH 12 INCH SPACING. DIAS SET AT 160.





# ROKE

GAMMA RAY NEUTRON LOG

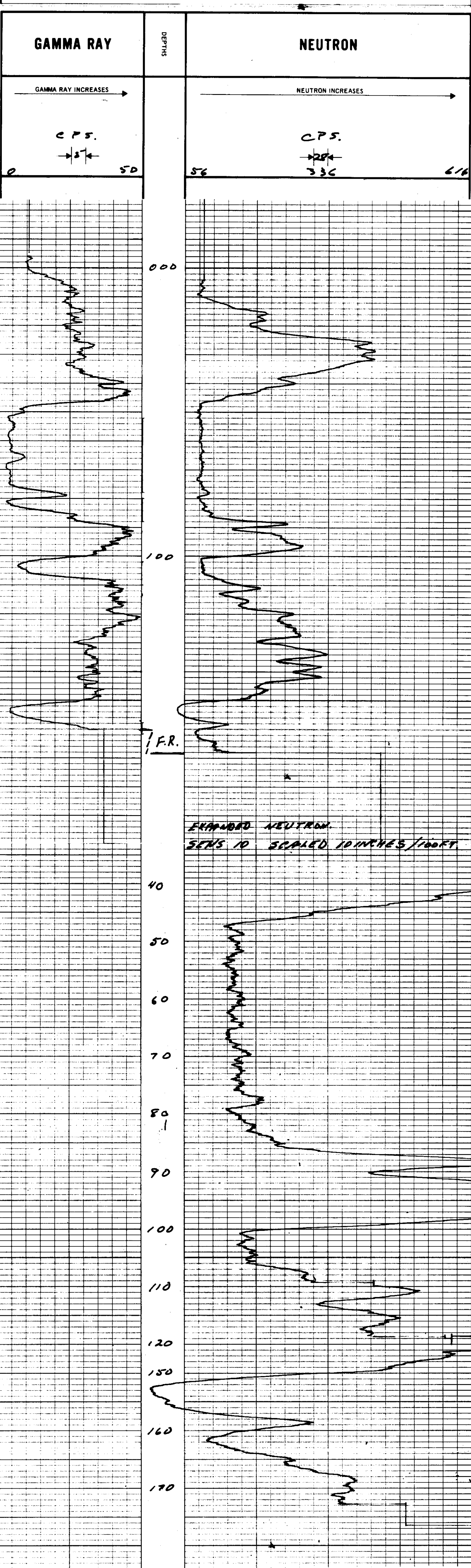
OIL ENTERPRISES LTD. CALGARY, ALBERTA

K-FORMS 70(3A-1)

FILE NO.	COMPANY <b>FORBINE COAL LIMITED</b>
LSD	WELL <b>RH 163.</b>
SEC	LOCATION <b>GREENHILLS.</b>
TWP	RGE
RGE	FIELD <b>EDDING RIVER</b>
W	M
PROVINCE <b>BRITISH COLUMBIA.</b>	
Permanent Datum	Elev. <b>GROUND LEVEL</b>
Log Measured from	Fl. Above Perm. Datum
Well Depths Measured from	G.L.
Run No.	<b>ONE</b>
Date	<b>13 SEPT. 1970</b>
First Reading	<b>168</b>
Last Reading	<b>000</b>
Footage Logged	<b>169</b>
Depth Reached	<b>169</b>
Depth Driller	
Casing Hole	
Casing Driller	
Fluid Type	<b>WATER</b>
Liquid Level	<b>0 FT.</b>
Mfn. Dam.	
Operating Time	<b>2 HRS</b>
Truck No.	<b>20</b>
Recorded By	<b>PETERSON</b>
Witnessed By	<b>TARLIN</b>

EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	<b>ONE</b>	RUN NO.	<b>ONE</b>
TOOL MODEL NO.		LOG TYPE	<b>NEUTRON/NEUTRON</b>
DIAMETER	<b>1 1/2</b>	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	<b>1 1/2</b>
TYPE	<b>GEIGER</b>	DETECTOR MODEL NO.	
LENGTH	<b>18 INCH</b>	TYPE	<b>PROPORTIONAL</b>
DISTANCE TO N. SOURCE	<b>8.55 FT</b>	LENGTH	<b>6 INCH</b>
GENERAL		SOURCE MODEL NO.	<b>MRC-N-SS-W</b>
HOIST TRUCK NO.	<b>1020</b>	SERIAL NO.	<b>578</b>
INSTRUMENT TRUCK NO.		SPACING	<b>19 INCH.</b>
TOOL SERIAL NO.	<b>CCN2704165</b>	TYPE	<b>AmBe</b>
		STRENGTH	<b>6.94 x 10<sup>6</sup> N/S</b>

LOGGING DATA											
GENERAL			GAMMA RAY				NEUTRON				
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED FT/MIN	T.C. SEC.	SENS. SETTINGS	ZERO DIV L OR R	API G R UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV L OR R	API N UNITS PER LOG DIV.
<b>1</b>	<b>000</b>	<b>169</b>	<b>11</b>	<b>4</b>	<b>25</b>	<b>0</b>	<b>5 CPS.</b>	<b>4</b>	<b>4</b>	<b>24</b>	<b>28 CPS.</b>



# ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

FILE NO. COMPANY **FORDING COAL LIMITED**

WELL **R.H. 163**

LOCATION **GREENHILLS**

FIELD **FORDING RIVER**

PROVINCE **BRITISH COLUMBIA**

Permanent Datum **GROUND LEVEL** Elev. \_\_\_\_\_

Log Measured from **GROUND LEVEL** Ft. Above Perm. Datum \_\_\_\_\_

Well Depths Measured from \_\_\_\_\_

Run No.	<b>ONE</b>
Date	<b>20/1/50</b>
First Reading	<b>86</b>
Last Reading	<b>000</b>
Footage Logged	<b>86</b>
Depth Reached	<b>87</b>
Depth Driller	<b>130</b>
Casing Role	
Casing Driller	
Fluid Type	<b>WATER</b>
Liquid Level	<b>19 FT</b>
Min. Diam.	
Operating Time	<b>2 HRS</b>
Truck No.	<b>20</b>

Recorded by **PETERSON** Witnessed by **PETERSON**

**32**

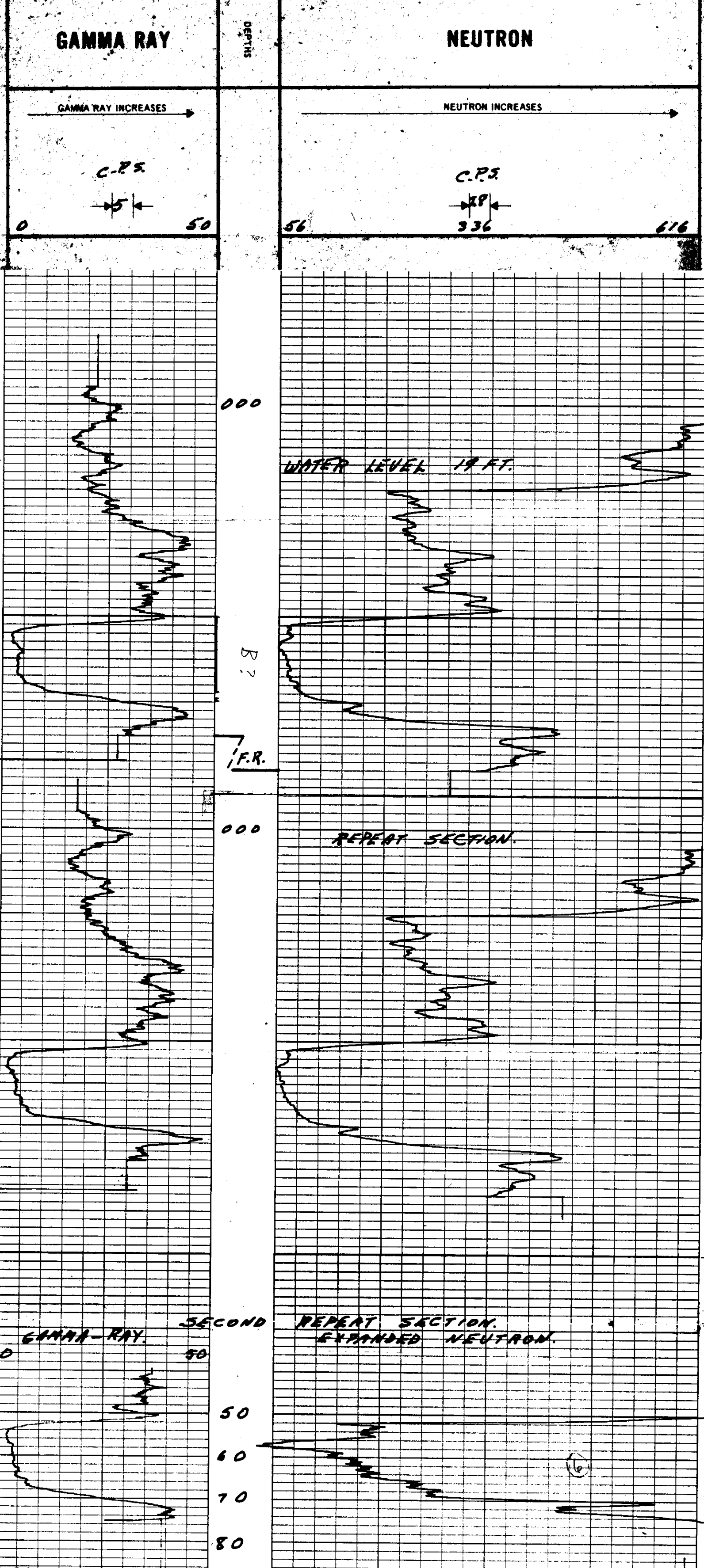
### EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	<b>ONE</b>	RUN NO.	<b>ONE</b>
TOOL MODEL NO.		LOG TYPE	<b>NEUTRON/NEUTRON</b>
DIAMETER	<b>1 1/2</b>	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	<b>1 1/2</b>
TYPE	<b>GEIGER</b>	DETECTOR MODEL NO.	
LENGTH	<b>18 INCH</b>	TYPE	<b>PROPORTIONAL</b>
DISTANCE TO N. SOURCE	<b>8.55 FT</b>	LENGTH	<b>6 INCH</b>
		SOURCE MODEL NO.	<b>MRC-N-8S-W</b>
GENERAL		SERIAL NO.	
HOIST TRUCK NO.	<b>1020</b>	SPACING	<b>18 INCH</b>
INSTRUMENT TRUCK NO.		TYPE	<b>AmBe</b>
SOUL SERIAL NO.	<b>CGNATM465</b>	STRENGTH	<b>6.94 x 10<sup>6</sup> N/S</b>

### LOGGING DATA

GENERAL		GAMMA RAY				NEUTRON				
RUN NO.	DEPTHS FROM TO	SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API GR UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
<b>20</b>	<b>000 86</b>	<b>11</b>	<b>4</b>	<b>25</b>	<b>0</b>	<b>50PS.</b>	<b>4</b>	<b>4</b>	<b>2L</b>	<b>20CPS.</b>
<b>*</b>	<b>000 86</b>	<b>(FIRST REPEAT SCALED AS ABOVE)</b>								
<b>*</b>	<b>50 75</b>	<b>11</b>	<b>4</b>	<b>25</b>	<b>0</b>	<b>50PS</b>	<b>4</b>	<b>10</b>	<b>50L</b>	

REMARKS  
**\* SECOND REPEAT SECTION: (EXPANDED NEUTRON 10:1 RATE)**  
**GAMMA-RAY - SCALED AS ABOVE. (OVER ORIGINAL LOG.)**  
**NEUTRON - LOGGED WITH 18 INCH SPACING. DIAL SET AT 160.**



# ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

K-forecast-70(3)A

FILE NO.	COMPANY	FORDING COAL LIMITED
LSD	WELL	R.H. 164
SEC	LOCATION	GREENHILLS
TWP	RGE	
RGE	FIELD	FORDING RIVER
W		
M	PROVINCE	BRITISH COLUMBIA
Permanent Datum	GROUND LEVEL	Elev. _____
Log Measured from	GROUND LEVEL	Ft. Above Perm. Datum _____
Well Depths Measured from		G.L. _____
Run No.	ONE	
Date	30 JULY 70	
First Reading	196	
Last Reading	000	
Footage Logged	196	
Depth Reached	197	
Depth Driller	200	
Casing Roke		
Casing Driller		
Fluid Type	WATER	
Liquid Level	4.5	
Min. Diam.		
Operating Time	2 HOURS	
Truck No.	20	
Recorded By	PETERSON	Witnessed By PEARSON

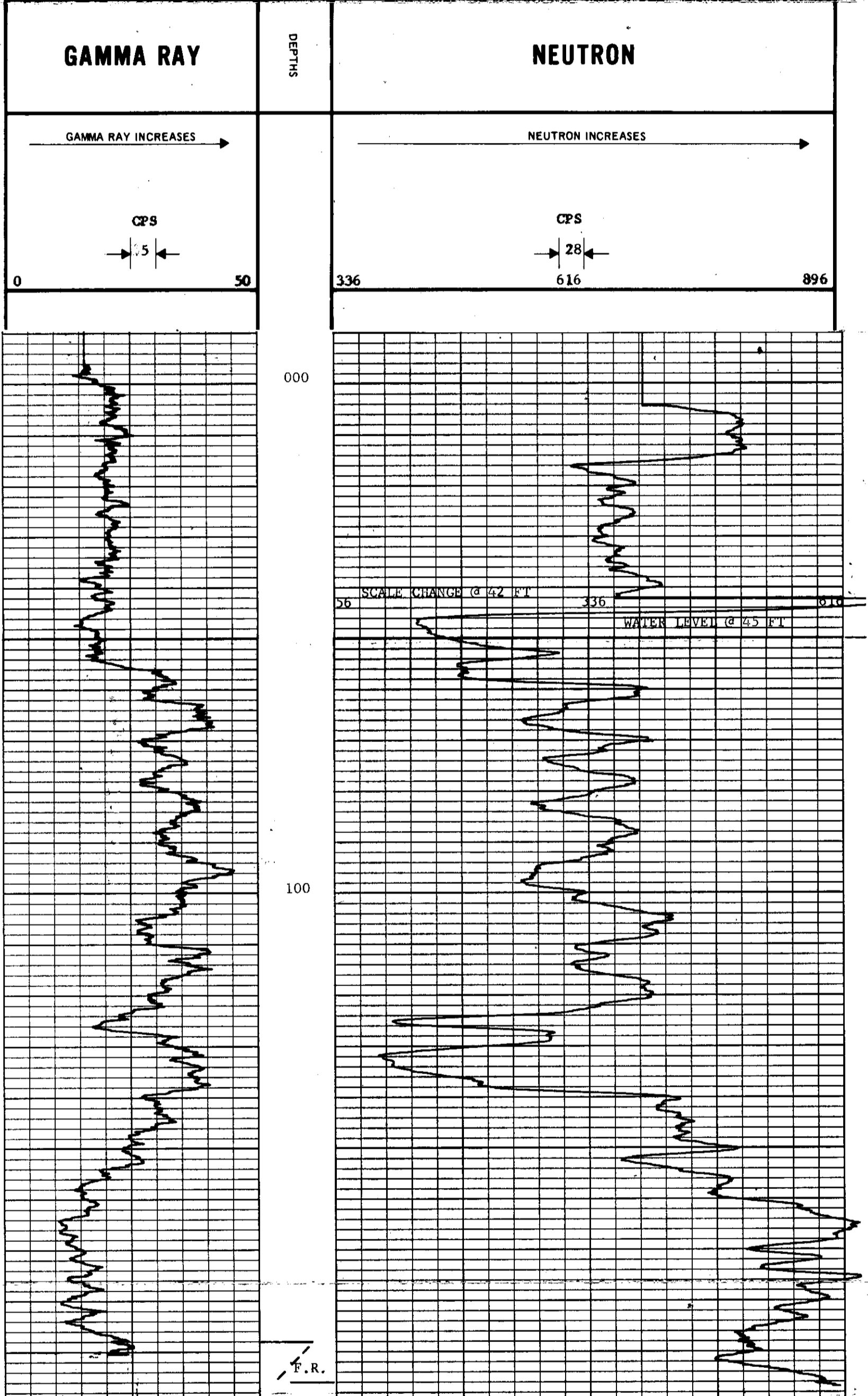
312

EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/8	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	1 1/8
TYPE	GEIGER	DETECTOR MODEL NO.	
LENGTH	18 INCH	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	8.55 FT	LENGTH	6 INCH
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	598
HOIST TRUCK NO.	20	SPACING	19 INCH
INSTRUMENT TRUCK NO.		TYPE	AmBe
TOOL SERIAL NO.	CGN27U4A65	STRENGTH	6.94 x 10 <sup>6</sup> N/S

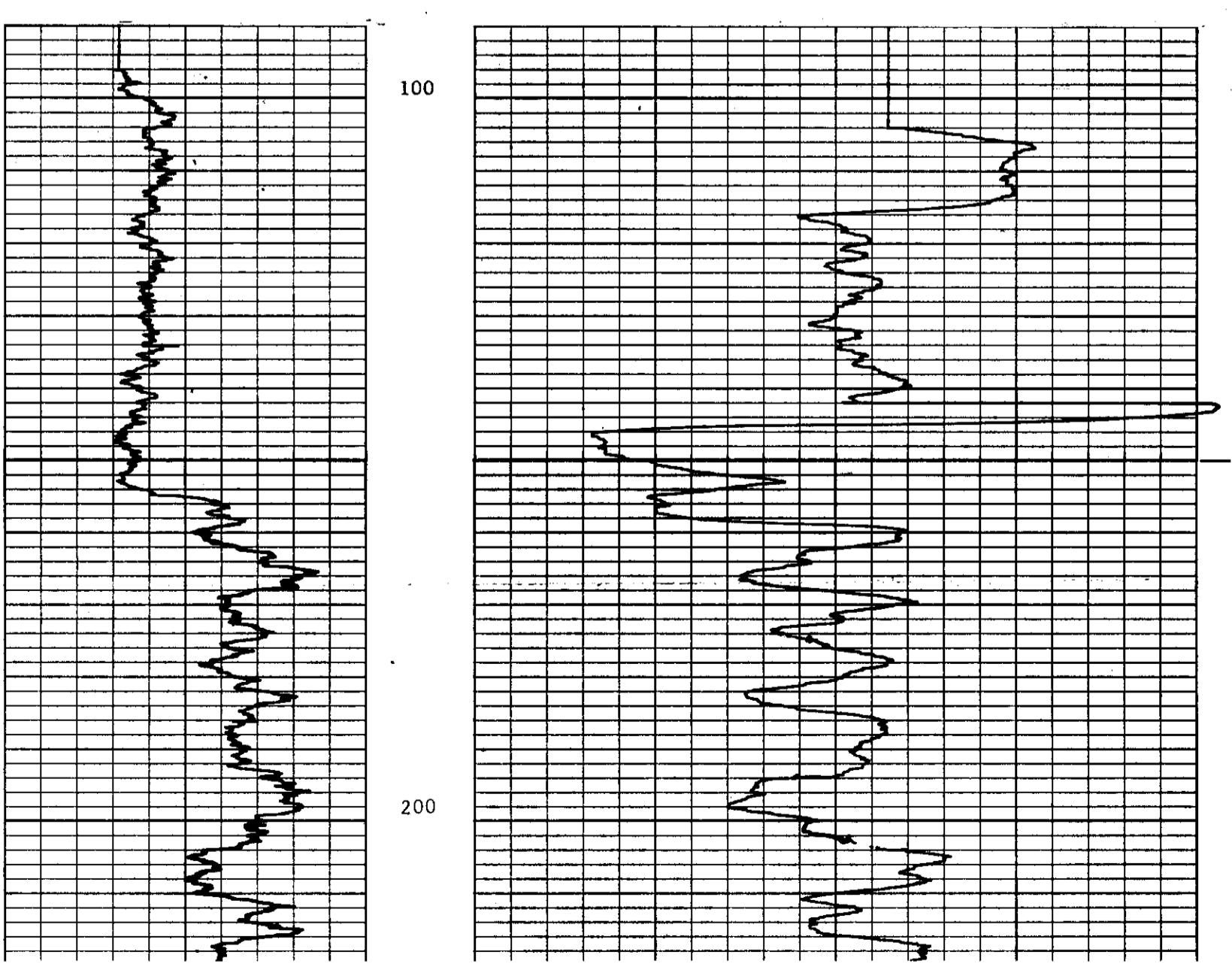
  

LOGGING DATA											
RUN NO.	GENERAL			GAMMA RAY				NEUTRON			
	DEPTHS	SPEED	T.C.	SENS	ZERO	API G.R. UNITS	T.C.	SENS.	ZERO	API N. UNITS	
	FROM	TO	FT/MIN	SEC.	SETTINGS	DIV. L OR R	PER LOG DIV.	SEC.	SETTINGS	DIV. L OR R	PER LOG DIV.
1	0	42	11	4	25	0	5 cps	4	4	12L	28 cps
	42	196	11	4	25	0	5 cps	4	4	2L	28 cps

REMARKS



REPEAT SECTION



# ROKE

GAMMA RAY NEUTRON LOG

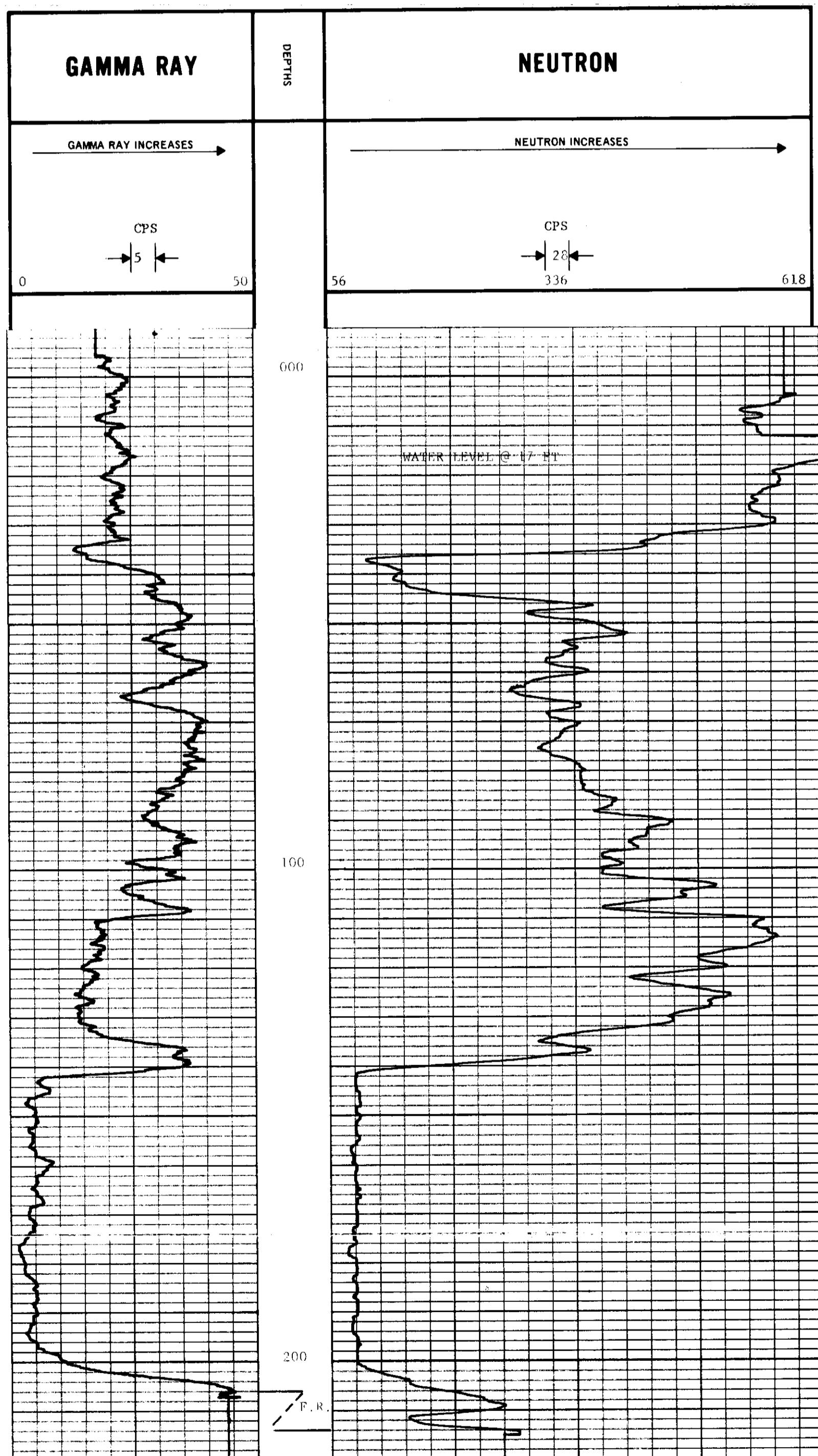
R-560-1-70(3)A

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	COMPANY	FORDING COAL LIMITED
LSD	WELL	R.H. 168
SEC	LOCATION	GREENHILLS
TWP	RGE	FORDING RIVER
RGE	FIELD	FORDING RIVER
W	M	
PROVINCE	BRITISH COLUMBIA	
Permanent Datum	GROUND LEVEL	Elev. _____
Log Measured from	GROUND LEVEL	Ft. Above Perm. Datum _____
Well Depths Measured from		K.B. _____
		D.F. _____
		G.L. _____
Run No.	ONE	
Date	5 SEPT 70	
First Reading	214	
Last Reading	0	
Footage Logged	214	
Depth Reached	215	
Depth Driller	-	
Casing Roke	-	
Casing Driller	-	
Fluid Type	WATER	
Liquid Level	17	
Min. Diam.		
Operating Time	2 HOURS	
Truck No.	20	
Recorded By	PETERSON	Witnessed By
		MCFARLAND

312

EQUIPMENT DATA											
GAMMA RAY						NEUTRON					
RUN NO.	ONE					RUN NO.	ONE				
TOOL MODEL NO.						LOG TYPE	NEUTRON/NEUTRON				
DIAMETER	1 1/8					TOOL MODEL NO.					
DETECTOR MODEL NO.						DIAMETER	1 1/8				
TYPE	GEIGER					DETECTOR MODEL NO.					
LENGTH	18 INCH					TYPE	PROPORTIONAL				
DISTANCE TO N. SOURCE	8.55 FT					LENGTH	6 INCH				
GENERAL						SOURCE MODEL NO.	MRC-N-SS-W				
HOIST TRUCK NO	20					SERIAL NO.	598				
INSTRUMENT TRUCK NO.						SPACING	19 INCH				
TOOL SERIAL NO.	CGN27U4A65					TYPE	AmBe				
						STRENGTH	6.94 x 10 <sup>6</sup> N/S				
LOGGING DATA											
GENERAL			GAMMA RAY					NEUTRON			
RUN NO.	DEPTHS		SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
	FROM	TO									
1	000	214	11	4	25	0	5 cps	4	4	2L	28 cps
REMARKS											



K-Forecast 7013A-1

# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	COMPANY	FORDING COAL LIMITED
LSD	WELL	R.H. 169
SEC	LOCATION	GREENHILLS
TWP	RGE	
N	W	M
FIELD	FORDING RIVER	
PROVINCE	BRITISH COLUMBIA	
PERMITS	GROUND LEVEL	Elev. _____
Log Measured from	GROUND LEVEL	Ft. Above Perm. Datum _____
Well Depth Measured from		K.B. _____
		D.F. _____
		G.L. _____
Run No.	ONE	
Date	6 SEPT 70	
First Reading	361	
Last Reading	0	
Footage Logged	361	
Depth Reached	362	
Depth Driller		
Casing Driller		
Casing Roke		
Fluid Type	WATER	
Liquid Level	39	
Min. Diam.		
Operating Time	3 HOURS	
Truck No.	20	
Recorded By	PETERSON	Witnessed By
		MCRIANLAND

312

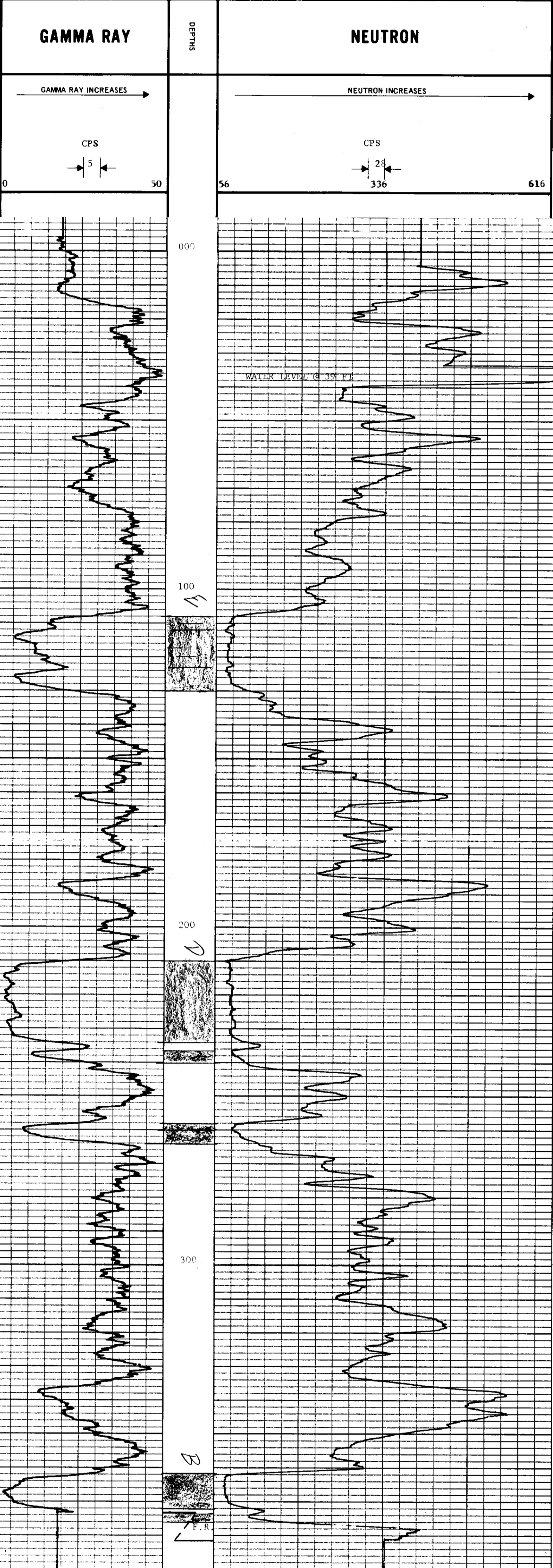
EQUIPMENT DATA

GAMMA RAY				NEUTRON			
RUN NO.	ONE			RUN NO.	ONE		
TOOL MODEL NO.				LOG TYPE	NEUTRON/NEUTRON		
DIAMETER	1 1/2			TOOL MODEL NO.			
DETECTOR MODEL NO.				DIAMETER	1 1/2		
TYPE	GEIGER			DETECTOR MODEL NO.			
LENGTH	18 INCH			TYPE	PROPORTIONAL		
DISTANCE TO N. SOURCE	8.55 FT			LENGTH	6 INCH		
GENERAL				SOURCE MODEL NO.	MRC-N-SS-W		
HOIST TRUCK NO.	20			SERIAL NO.	598		
INSTRUMENT TRUCK NO.				SPACING	19 INCH		
TOOL SERIAL NO.	CGX27114A65			TYPE	AmBe		
				STRENGTH	6.94 x 10 <sup>6</sup> N/S		

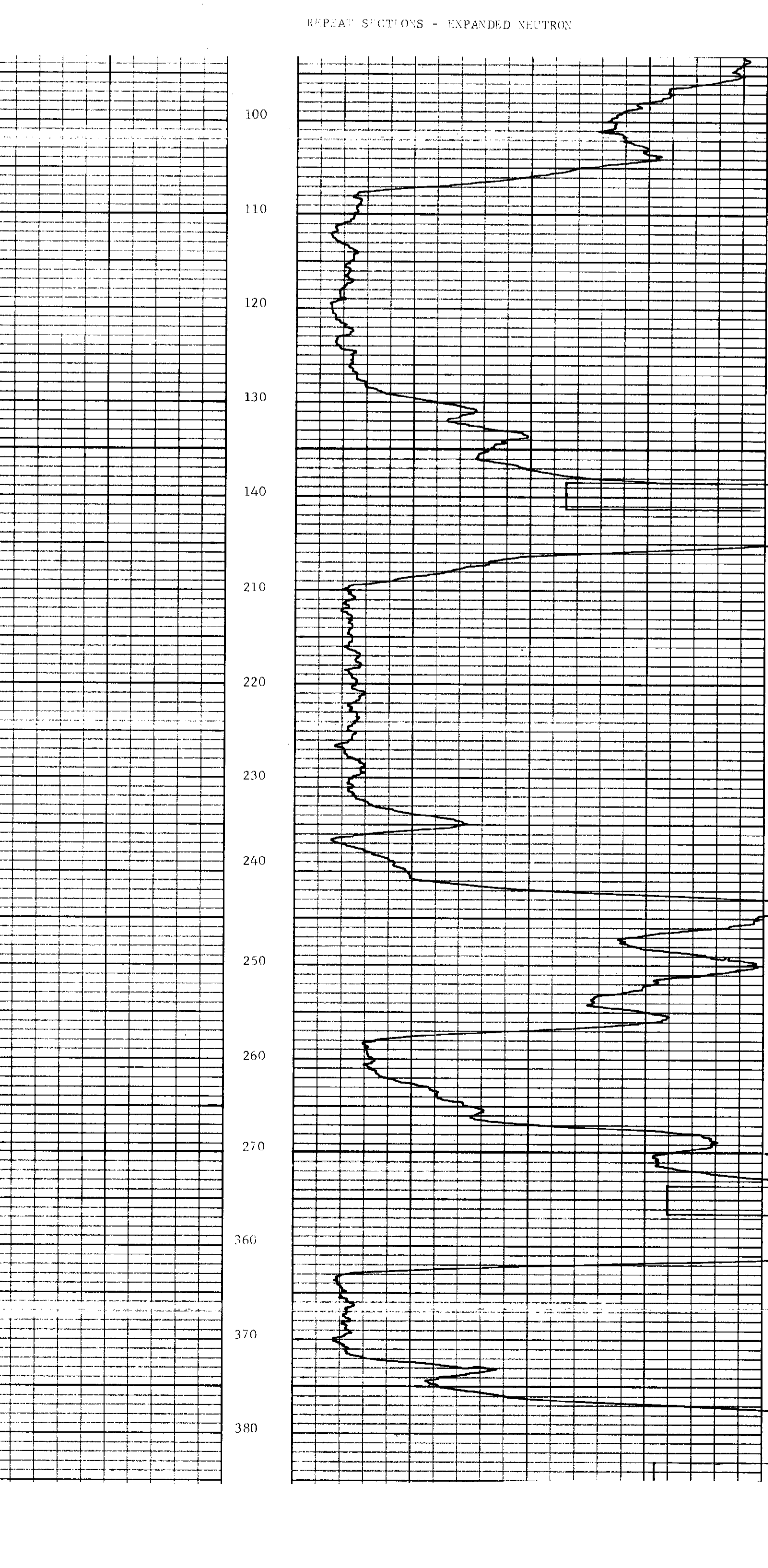
LOGGING DATA

RUN NO.	DEPTHS		SPEED FT/MIN	GAMMA RAY				NEUTRON			
	FROM	TO		T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	000	361	11	4	25	0	5 cps	4	4	2L	28 cps

REMARKS  
INTERVALS OVER COAL BEDS - 12 INCH SPACING SENS - 10  
SCALED 10 INCHES PER 100 FT.



REPEAT SECTIONS - EXPANDED NEUTRON



# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

R-500000 20/3/51

FILE NO.	COMPANY	WELL	LOCATION	FIELD	PROVINCE
LSD	FORDING COAL LIMITED	R. H. 169	GREENHILLS	FORDING RIVER	BRITISH COLUMBIA
SIC					
TWP					
RGE					
W					
M					
Permanant Datum	GROUND LEVEL	Elev.	K.B.		
Log Measured from	GROUND LEVEL	Fl. Above Perm. Datum	D.F.		
Well Depths Measured from			G.L.		
Run No.	ONE				
Date	6 SEPT '70				
First Reading	361				
Last Reading	0				
Footage Logged	361				
Depth Reached	362				
Casing Driller					
Casing Driller					
Fluid Type	WATER				
Liquid Level	39				
Min. Diam.					
Operating Time	3 HOURS				
Truck No.	20				
Recorded By	PETERSON	Witnessed By	MCINTYRE		

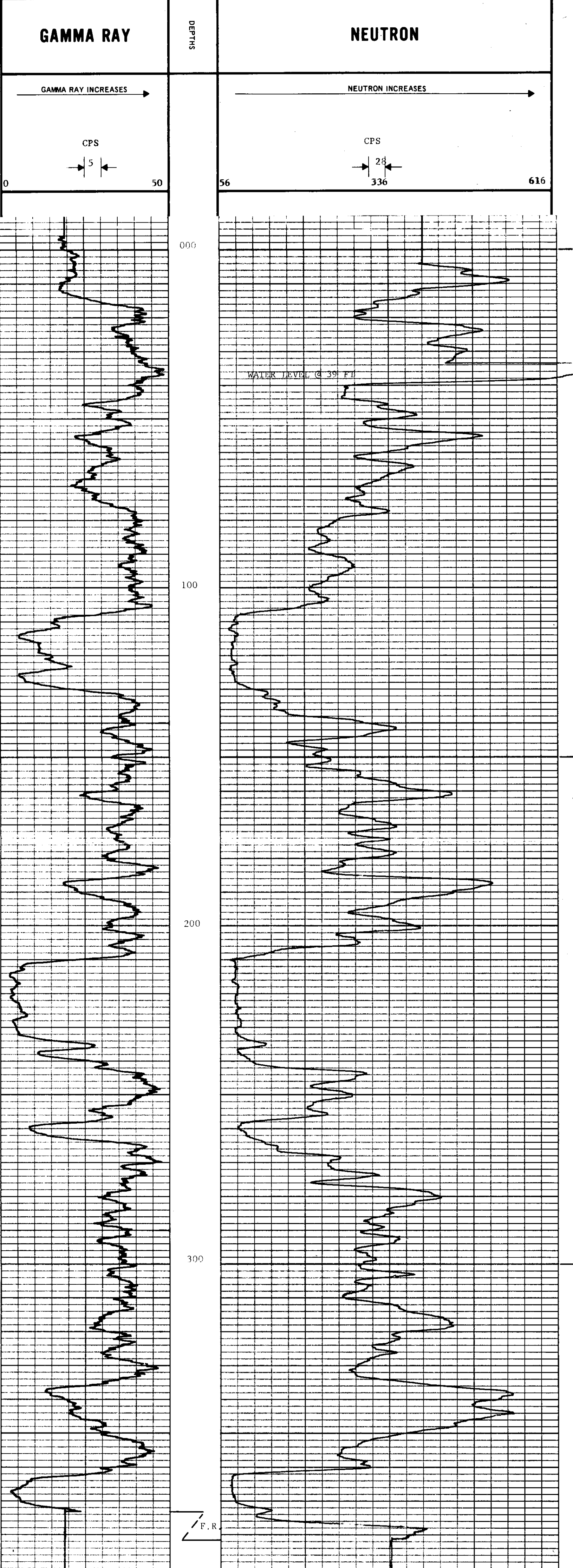
312

EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/2	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	1 1/2
TYPE	GEIGER	DETECTOR MODEL NO.	
LENGTH	18 INCH	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	8.55 FT	LENGTH	6 INCH
		SOURCE MODEL NO.	MRC-N-SS-W
		SERIAL NO.	598
HOIST TRUCK NO.	20	SPACING	19 INCH
INSTRUMENT TRUCK NO.		TYPE	AmBe
TOOL SERIAL NO.	CGN27114A65	STRENGTH	6.94 x 10 <sup>6</sup> N/S

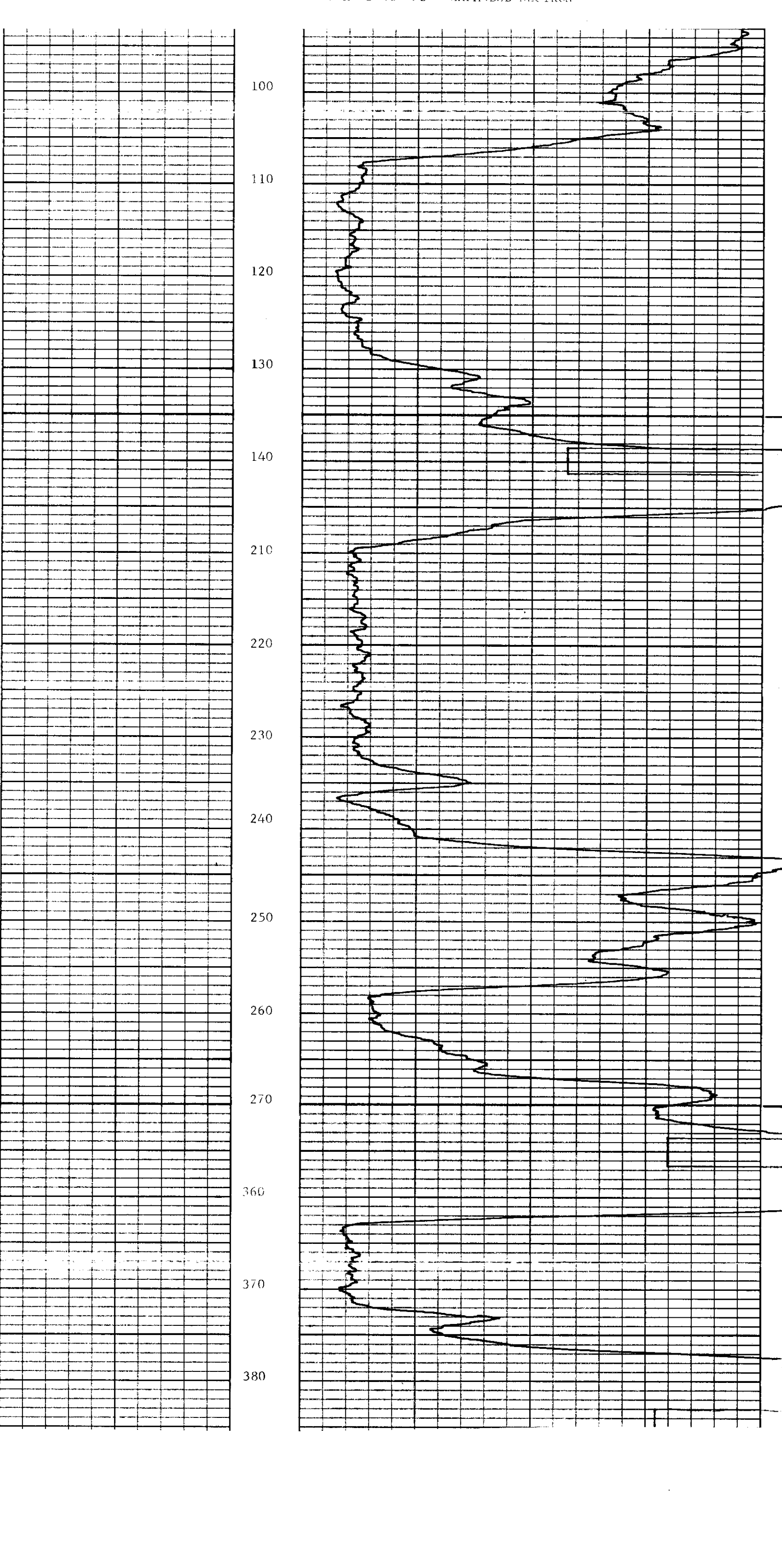
  

LOGGING DATA					
GENERAL		GAMMA RAY		NEUTRON	
RUN NO.	DEPTHS	SPEED FT/MIN	T.C. SEC.	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.
1	000 TO 361	11	4	25	0
					5 cps
					4
					4
					2L
					28 cps

REMARKS: INTERVALS OVER COAL BEDS - 12 INCH SPACING SENS - 10 SCALED 10 INCHES PER 100 FT.



REPEAT SECTIONS - EXPANDED NEUTRON



K-FRACENS 70(3)A-1

# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD., CALGARY, ALBERTA

FILE NO. COMPANY **PARDINE CONL LIMITED**

WELL **RM 172**

LOCATION **CREE HILLS**

FIELD **FORDING RIVER**

PROVINCE **BRITISH COLUMBIA**

Log Measured from **GROUND LEVEL** Elev. \_\_\_\_\_ Ft. Above Perm. Datum

Well Depths Measured from \_\_\_\_\_ G.L. \_\_\_\_\_

Run No.	<b>ONE</b>
Date	<b>31 JULY 70</b>
First Reading	<b>383</b>
Last Reading	<b>000</b>
Footage Logged	<b>383</b>
Depth Reached	<b>384</b>
Depth Driller	
Casing Driller	
Fluid Type	<b>WATER</b>
Liquid Level	<b>107 FT.</b>
Min. Diam.	
Operating Time	<b>3 HRS</b>
Truck No.	<b>20</b>

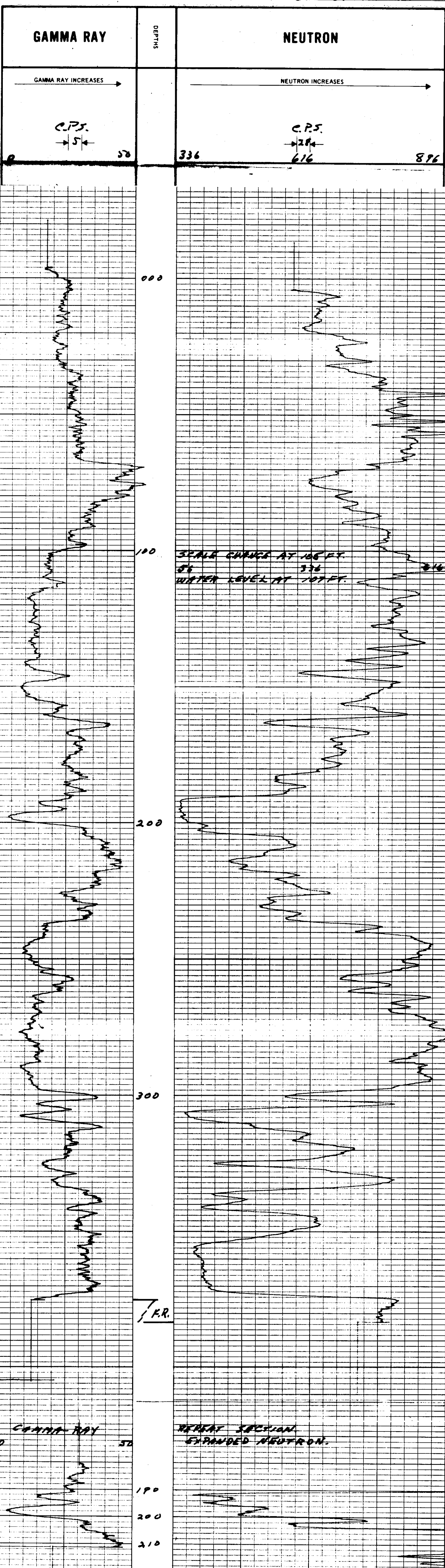
**312**

Recorded By **PETERSON** Witnessed By **PETERSON**

EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO	<b>ONE</b>	RUN NO	<b>ONE</b>
TOOL MODEL NO		LOG TYPE	<b>NEUTRON/NEUTRON</b>
DIAMETER	<b>1 1/8</b>	TOOL MODEL NO	
DETECTOR MODEL NO		DETECTOR MODEL NO	<b>1 1/8</b>
TYPE	<b>GEIGER</b>	TYPE	<b>PROPORTIONAL</b>
LENGTH	<b>18 INCH</b>	LENGTH	<b>6 INCH</b>
DISTANCE TO N. SOURCE	<b>8.55 FT</b>	SOURCE MODEL NO	<b>MRC-N-SS-W</b>
GENERAL		SERIAL NO	
HOIST TRUCK NO	<b>7820</b>	SPACING	<b>12 INCH.</b>
INSTRUMENT TRUCK NO		TYPE	<b>AmBe</b>
TOOL SERIAL NO	<b>CGN274A65</b>	STRENGTH	<b>6.94 x 10<sup>6</sup> N/S</b>

LOGGING DATA											
GENERAL			GAMMA RAY				NEUTRON				
RUN NO	DEPTHS FROM	TO	SPEED FT/MIN	T.C. SEC	SENS SETTINGS	ZERO DIV L OR R	API GR UNITS PER LOG DIV	T.C. SEC	SENS SETTINGS	ZERO DIV. L OR R	API N UNITS PER LOG DIV.
1	100	108	11	4	25	0	5 CPS	4	4	12L	2 CPS
	105	383	11	4	25	0	5 CPS	4	4	2L	2 CPS
*	190	210	11	4	25	0	5 CPS	4	10	50L	

REMARKS  
 \* REPEAT SECTION. EXPANDED NEUTRON 10:1 RATIO  
 GAMMA-RAY - SCALED AS ABOVE. OVER ORIGINAL LOG.  
 NEUTRON - LOGGED WITH 12 INCH SPACING. DIAL SET AT 160.



GAMMA RAY  
 58  
 190  
 200  
 210

REPEAT SECTION  
 EXPANDED NEUTRON.

# ROKE

GAMMA RAY NEUTRON LOG

K-Form 70(3)A

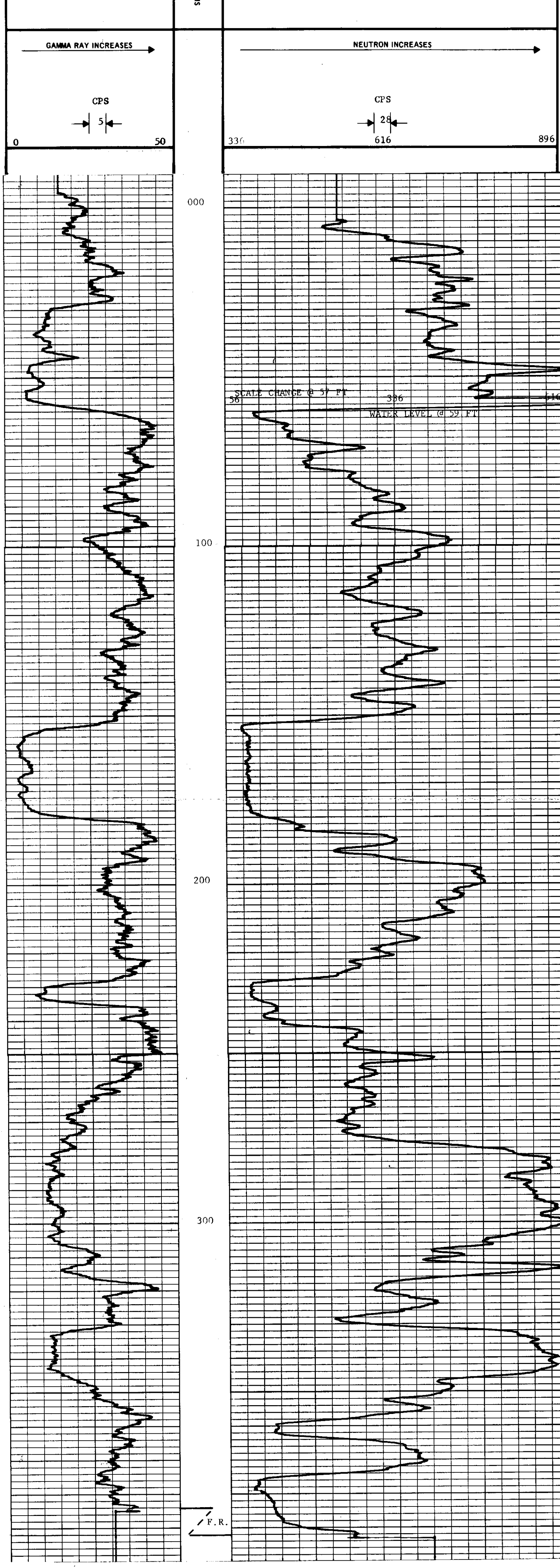
OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	COMPANY	FORDING COAL LIMITED
LSD	WELL	RH 175
TWP	LOCATION	GREENHILLS
RGE	FIELD	FORDING RIVER
M	PROVINCE	BRITISH COLUMBIA
GROUND LEVEL	Elev.	K.B.
Log Measured from	FL Above Perm. Datum	D.F.
Well Depth Measured from	G.L.	
Run No.	ONE	
Date	26 SEPT 70	
First Reading	392	
Last Reading	0	
Footage Logged	392	
Depth Reached	393	
Depth Driller		
Casing Driller		
Fluid Type	WATER	
Liquid Level	59	
Min. Diam.		
Operating Time	2 HOURS	
Truck No.	20	
Recorded By	PETERSON	Witnessed By
		PEARSON

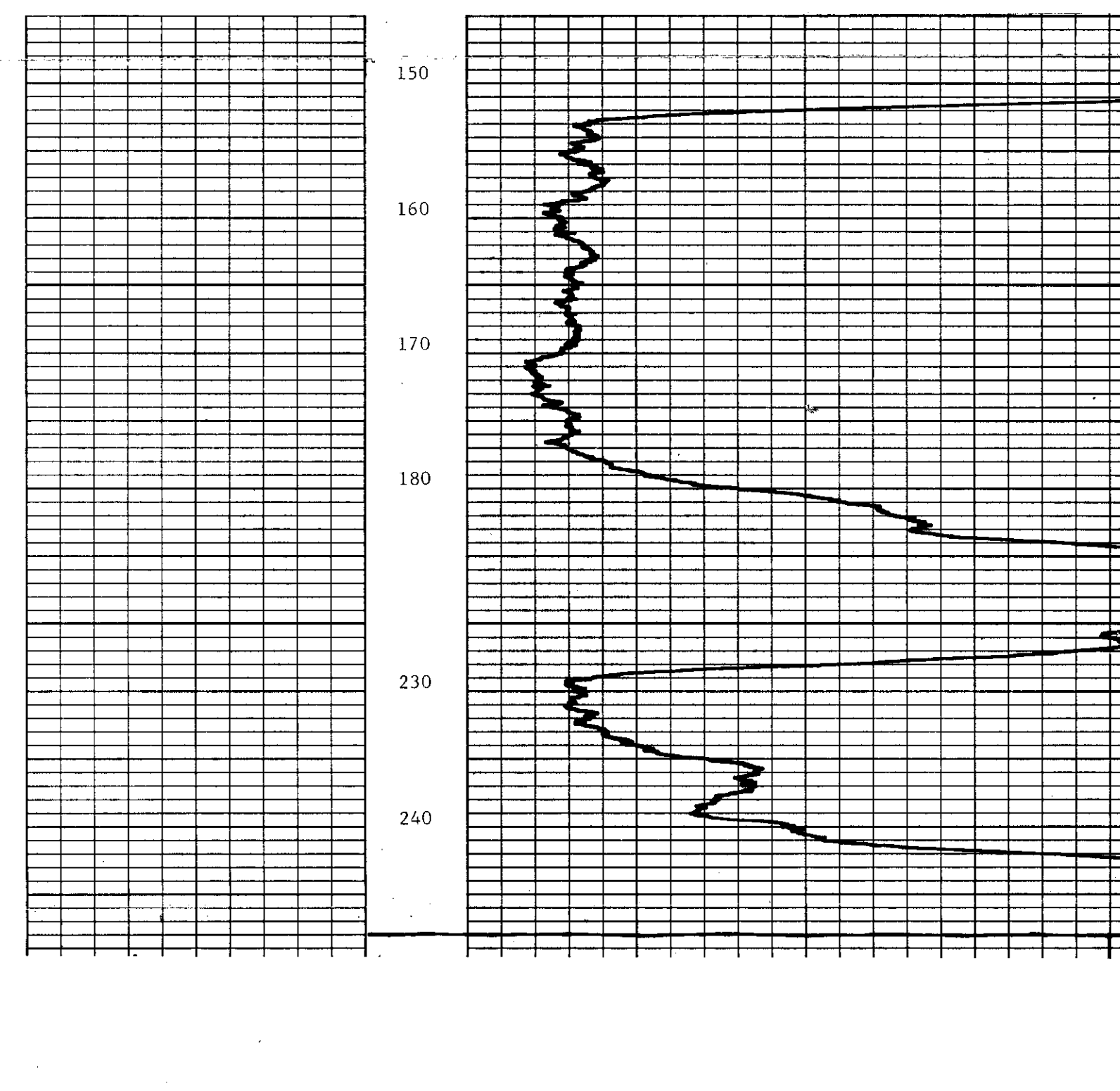
EQUIPMENT DATA		GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/2	TOOL MODEL NO.		TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	1 1/2	DIAMETER	1 1/2
TYPE	GEIGER	DETECTOR MODEL NO.		DETECTOR MODEL NO.	
LENGTH	18 INCH	TYPE		TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	8.55 FT	LENGTH		LENGTH	6 INCH
		SOURCE MODEL NO.		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.		SERIAL NO.	598
HOIST TRUCK NO.	20	SPACING		SPACING	19 INCH
INSTRUMENT TRUCK NO.		TYPE		TYPE	AmBe
TOOL SERIAL NO.	CCN27U4A65	STRENGTH		STRENGTH	6.94 x 10 <sup>6</sup> N/S

LOGGING DATA											
GENERAL			GAMMA RAY				NEUTRON				
RUN NO.	DEPTHS	SPEED	T.C.	SENS.	ZERO	API G.R.	T.C.	SENS.	ZERO	API N. UNITS	
	FROM	FT/MIN	SEC.	SETTINGS	DIV. L OR R	PER LOG DIV.	SEC.	SETTINGS	DIV. L OR R	PER LOG DIV.	
1	0	57	11	4	25	0	4	4	12L	28	CPS
	57	393	11	4	25	0	4	4	2L	28	CPS

REMARKS



REPEAT SECTIONS - EXPANDED NEUTRON





# ROKE

GAMMA RAY NEUTRON LOG

K-formation 20/3/70-1

FILE NO. \_\_\_\_\_ COMPANY FORDING COAL LIMITED  
 LSD \_\_\_\_\_ WELL RH 176  
 SEC \_\_\_\_\_ TWP GREENHILLS  
 RGE \_\_\_\_\_ FIELD FORDING RIVER  
 W \_\_\_\_\_ M \_\_\_\_\_  
 PROVINCE BRITISH COLUMBIA  
 Permanent Datum GROUND LEVEL Elev. \_\_\_\_\_ K.B. \_\_\_\_\_  
 Log Measured from GROUND LEVEL Ft. Above Perm. Datum D.F. \_\_\_\_\_  
 Well Depths Measured from \_\_\_\_\_ G.L. \_\_\_\_\_

Run No. ONE  
 Date 7 OCT 70  
 First Reading 400  
 Last Reading 0  
 Footage Logged 400  
 Depth Reached 401  
 Depth Driller \_\_\_\_\_  
 Casing Driller \_\_\_\_\_  
 Fluid Type WATER  
 Liquid Level 16  
 Min. Diam. \_\_\_\_\_  
 Operating Time 2 HOURS  
 Truck No. 20  
 Recorded By PETERSON Witnessed By BEARSON

312

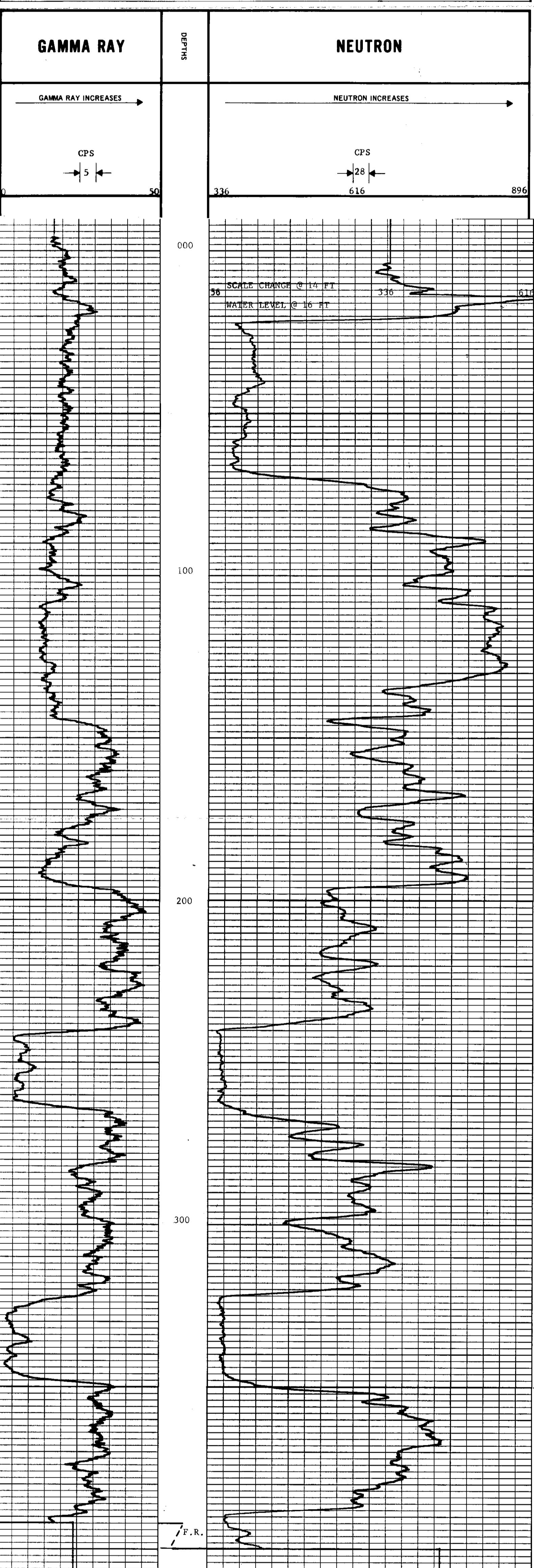
### EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/8	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	1 1/8
TYPE	GEIGER	DETECTOR MODEL NO.	
LENGTH	18 INCH	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	8.55 FT	LENGTH	6 INCH
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	598
HOIST TRUCK NO.	20	SPACING	19 INCH
INSTRUMENT TRUCK NO.		TYPE	AmBe
TOOL SERIAL NO.	CGN27114A65	STRENGTH	6.94 x 10 <sup>6</sup> N/S

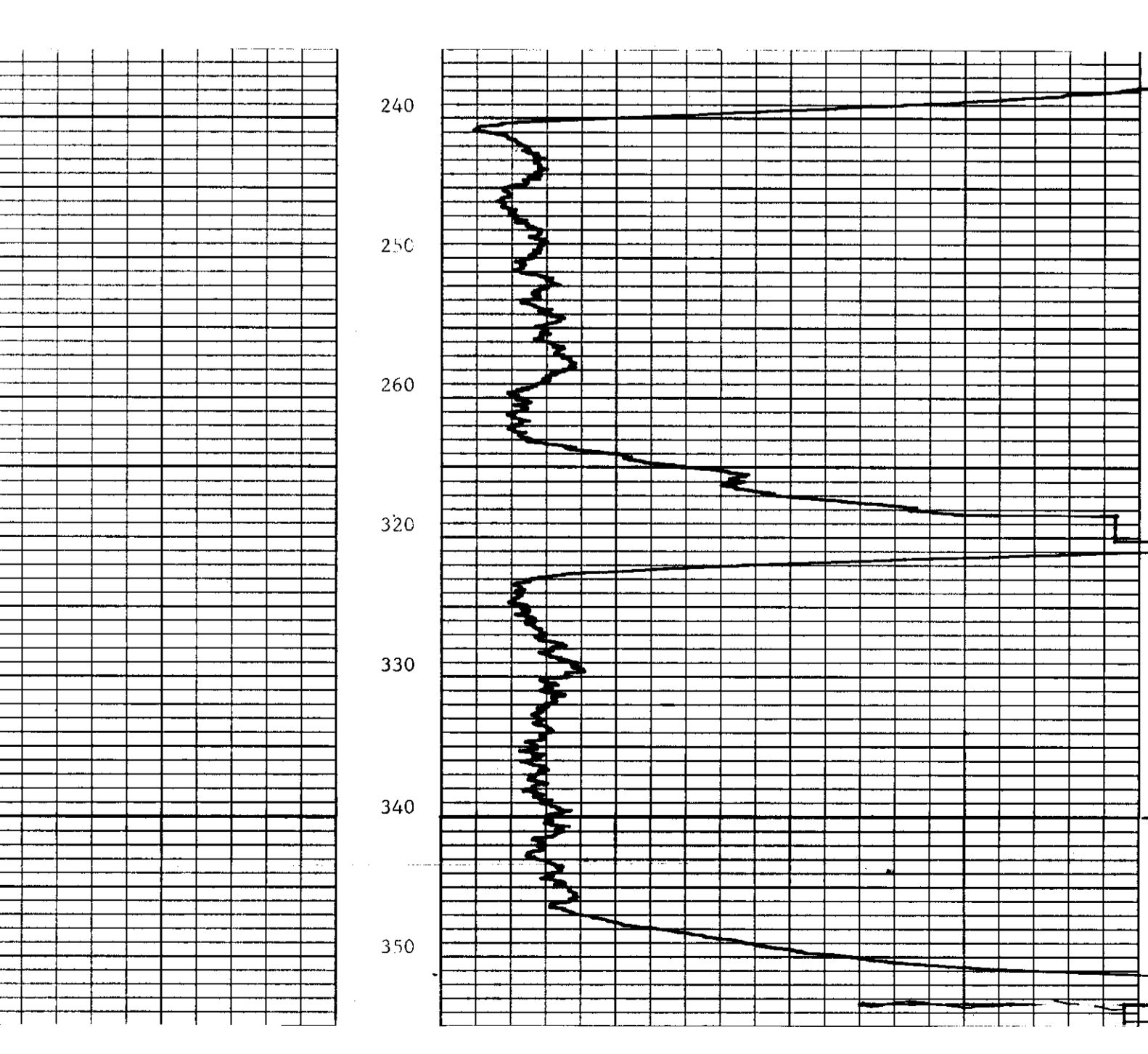
### LOGGING DATA

RUN NO.	DEPTHS		SPEED FT/MIN	GAMMA RAY				NEUTRON			
	FROM	TO		T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API G R UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	0	14	11	4	25	0	5 CPS	4	4	12L	28 CPS
	14	400	11	4	25	0	5 CPS	4	4	2L	28 CPS

REMARKS



### EXPANDED NEUTRON



# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO. COMPANY **FORDING COAL LIMITED**

WELL **RH 118**

LOCATION **GREEN HILLS**

FIELD **FORDING RIVER.**

PROVINCE **BRITISH COLUMBIA.**

Permanent Datum **GRAND LEVEL.** Elev. \_\_\_\_\_ K.B. \_\_\_\_\_

Log Measured from **CHAND. LEVEL.** Ft. Above Perm. Datum \_\_\_\_\_ D.F. \_\_\_\_\_

Well Depths Measured from \_\_\_\_\_ G.L. \_\_\_\_\_

Run No.	<b>ONE</b>
Date	<b>30 JULY 1970</b>
First Reading	<b>205</b>
Last Reading	<b>000</b>
Footage Logged	<b>205</b>
Depth Reached	<b>206</b>
Depth Driller	<b>225</b>
Casing Hole	
Casing Driller	
Fluid Type	<b>WATER</b>
Liquid Level	<b>9 FT.</b>
Min. Diam.	
Operating Time	<b>3 HRS.</b>
Truck No.	<b>20</b>

Recorded By **PETERSON** Witnessed By **PETERSON**

**312**

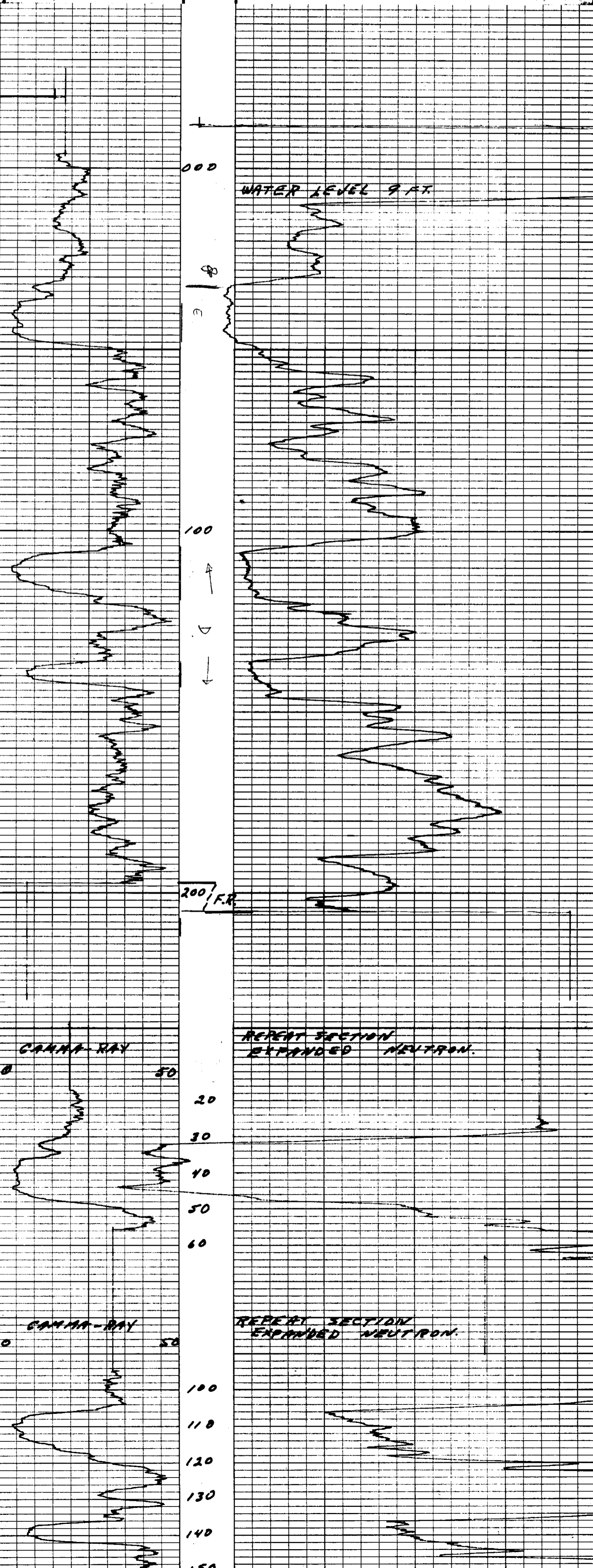
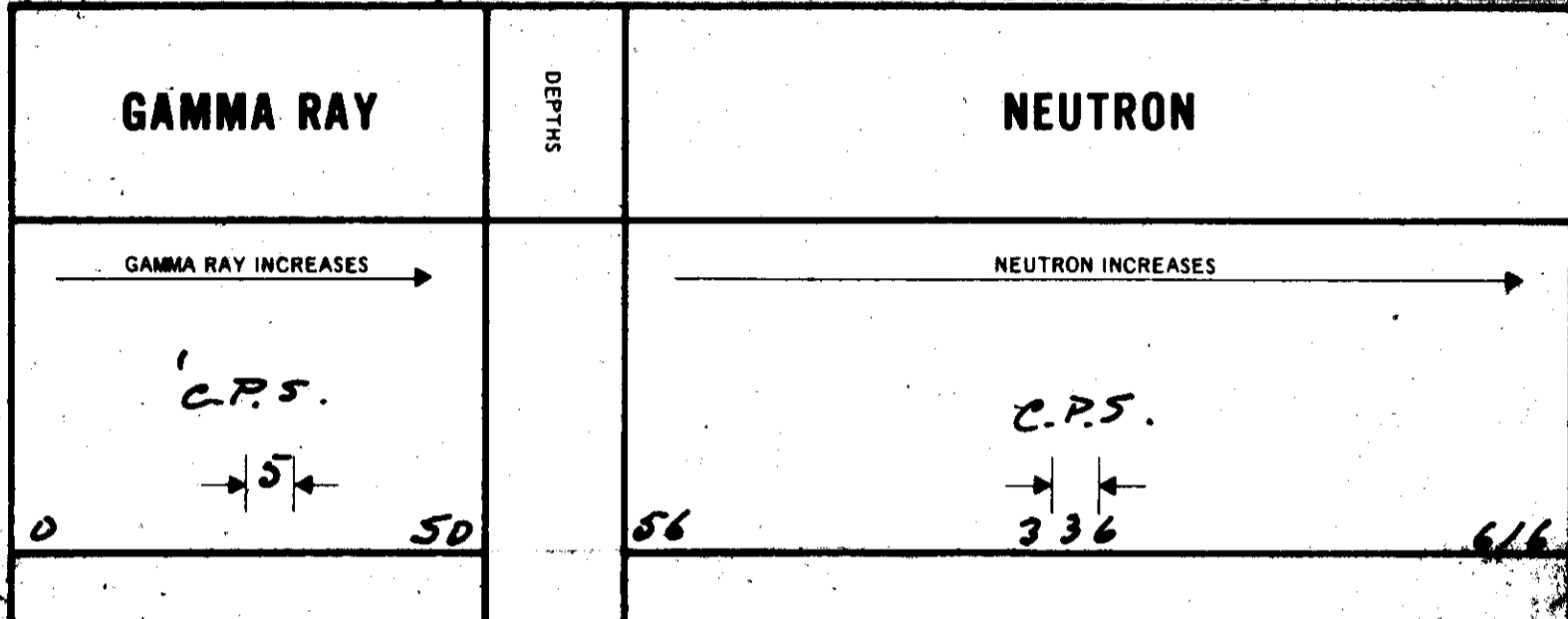
### EQUIPMENT DATA

GAMMA RAY				NEUTRON			
RUN NO.	<b>ONE</b>			RUN NO.	<b>ONE</b>		
TOOL MODEL NO.				LOG TYPE	<b>NEUTRON/NEUTRON</b>		
DIAMETER	<b>1 1/2</b>			TOOL MODEL NO.			
DETECTOR MODEL NO.				DIAMETER	<b>1 1/2</b>		
TYPE	<b>GEIGER</b>			DETECTOR MODEL NO.			
LENGTH	<b>18 INCH</b>			TYPE	<b>PROPORTIONAL</b>		
DISTANCE TO N. SOURCE	<b>8.55 FT</b>			LENGTH	<b>6 INCH</b>		
GENERAL				SOURCE MODEL NO.	<b>MRC-N-SS-W</b>		
HOIST TRUCK NO	<b>20</b>			SERIAL NO			
INSTRUMENT TRUCK NO				SPACING	<b>19 INCH.</b>		
TOOL SERIAL NO.	<b>68274465</b>			TYPE	<b>AmBe</b>		
				STRENGTH	<b>6.94 x 10<sup>6</sup> N/S</b>		

### LOGGING DATA

RUN NO.	DEPTHS		SPEED FT/MIN	T.C. SEC.	SENS. SETTINGS	GAMMA RAY		T.C. SEC.	SENS. SETTINGS	NEUTRON	
	FROM	TO				ZERO DIV L OR R	API GR UNITS PER LOG DIV.			ZERO DIV L OR R	API N. UNITS PER LOG DIV.
<b>ONE</b>	<b>000</b>	<b>205</b>	<b>11</b>	<b>4</b>	<b>25</b>	<b>0</b>	<b>5 CPS</b>	<b>4</b>	<b>4</b>	<b>24</b>	<b>28 CPS.</b>
*	<b>20</b>	<b>60</b>	<b>11</b>	<b>4</b>	<b>25</b>	<b>0</b>	<b>5 CPS</b>	<b>4</b>	<b>10</b>	<b>50L</b>	
*	<b>100</b>	<b>150</b>	<b>11</b>	<b>4</b>	<b>25</b>	<b>0</b>	<b>5 CPS</b>	<b>4</b>	<b>10</b>	<b>50L</b>	

REMARKS  
 \* REPEAT SECTIONS: **EXPANDED NEUTRON 10:1 RATIO**  
**GAMMA-RAY - SCALED AS ABOVE (OVER ORIGINAL LOG.)**  
**NEUTRON - LOGGED WITH 12 INCH SPACING, DIAL SET AT 160**



# ROKE

GAMMA RAY NEUTRON LOG

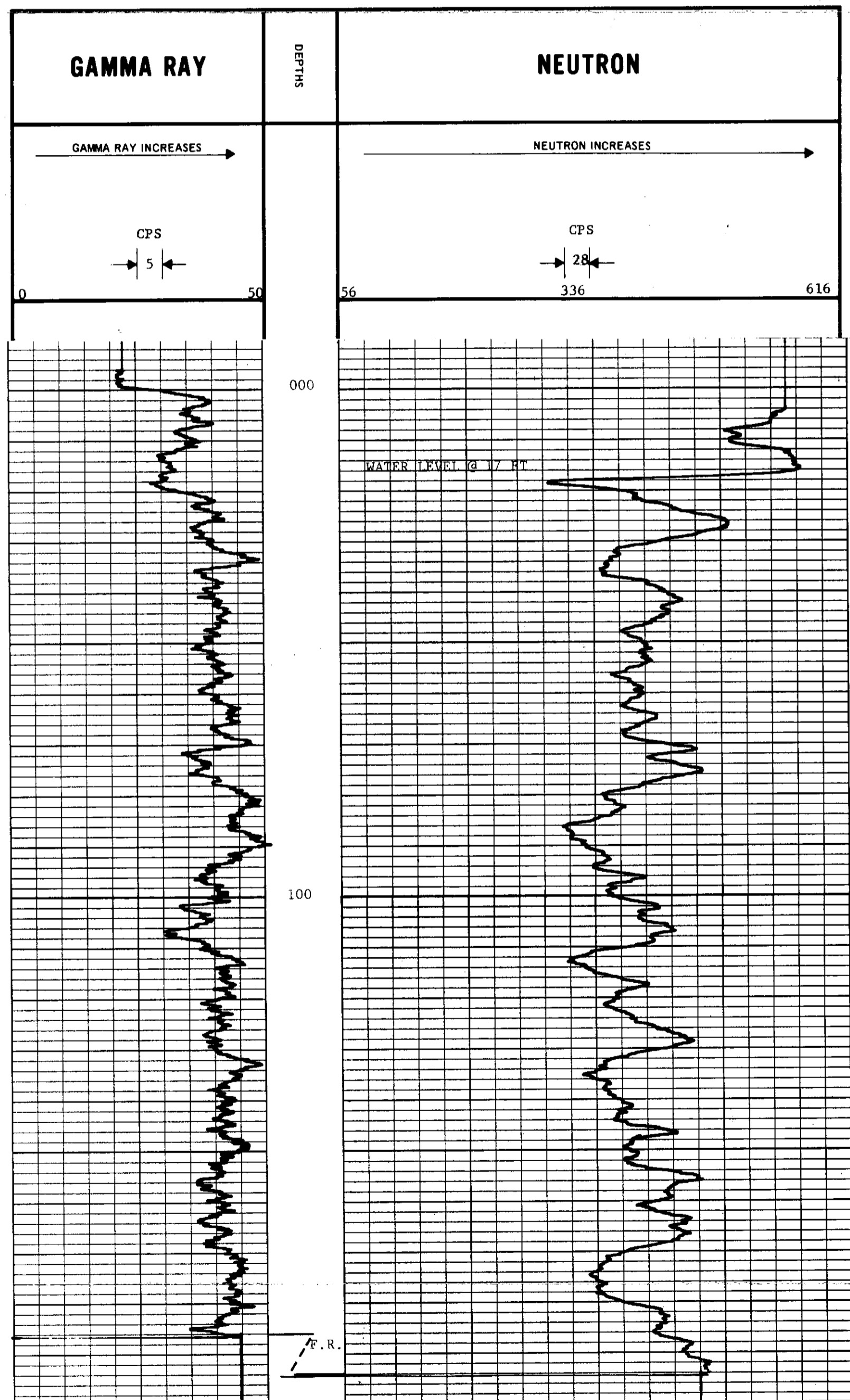
OIL ENTERPRISES LTD. CALGARY, ALBERTA

K-Features 70/31A-1

FILE NO.	COMPANY	FORDING COAL LIMITED
LSD	WELL	RH 179
SEC	TWP	GREENHILLS
RGE	LOC	FORDING RIVER
W	M	
PROV	PROV	BRITISH COLUMBIA
Permanet Datum	GROUND LEVEL	Elev. _____ Ft. Above Perm. Datum
Log Measured from	GROUND LEVEL	_____ Ft. Above Perm. Datum
Well Depths Measured from		
Run No.	ONE	
Date	7 OCT 70	
First Reading	194	
Last Reading	0	
Footage Logged	194	
Depth Reached	195	
Depth Driller		
Casing Roke		
Casing Driller		
Fluid Type	WATER	
Liquid Level	17	
Min. Diam.		
Operating Time	2 HOURS	
Truck No.	20	
Recorded By	PETERSON	Witnessed By
		PEARSON

312

EQUIPMENT DATA											
GAMMA RAY						NEUTRON					
RUN NO.	ONE					RUN NO.	ONE				
TOOL MODEL NO.						LOG TYPE	NEUTRON/NEUTRON				
DIAMETER	1 1/16					TOOL MODEL NO.					
DETECTOR MODEL NO.						DIAMETER	1 1/16				
TYPE	GEIGER					DETECTOR MODEL NO.					
LENGTH	18 INCH					TYPE	PROPORTIONAL				
DISTANCE TO N. SOURCE	8.55 FT					LENGTH	6 INCH				
GENERAL						SOURCE MODEL NO.	MRC-N-SS-W				
HOIST TRUCK NO.	20					SERIAL NO.	598				
INSTRUMENT TRUCK NO.						SPACING	19 INCH				
TOOL SERIAL NO.	CGN27U4A65					TYPE	AmBe				
						STRENGTH	6.94 x 10 <sup>6</sup> N/S				
LOGGING DATA											
GENERAL			GAMMA RAY				NEUTRON				
RUN NO.	DEPTHS		SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
	FROM	TO									
1	0	194	11	4	25	0	5 CPS	4	4	2L	28 CPS
REMARKS											



Greenhills  
 RH 180 to RH-199  
 K-FOOTING (243A-1)

Mullins : 188, 190.

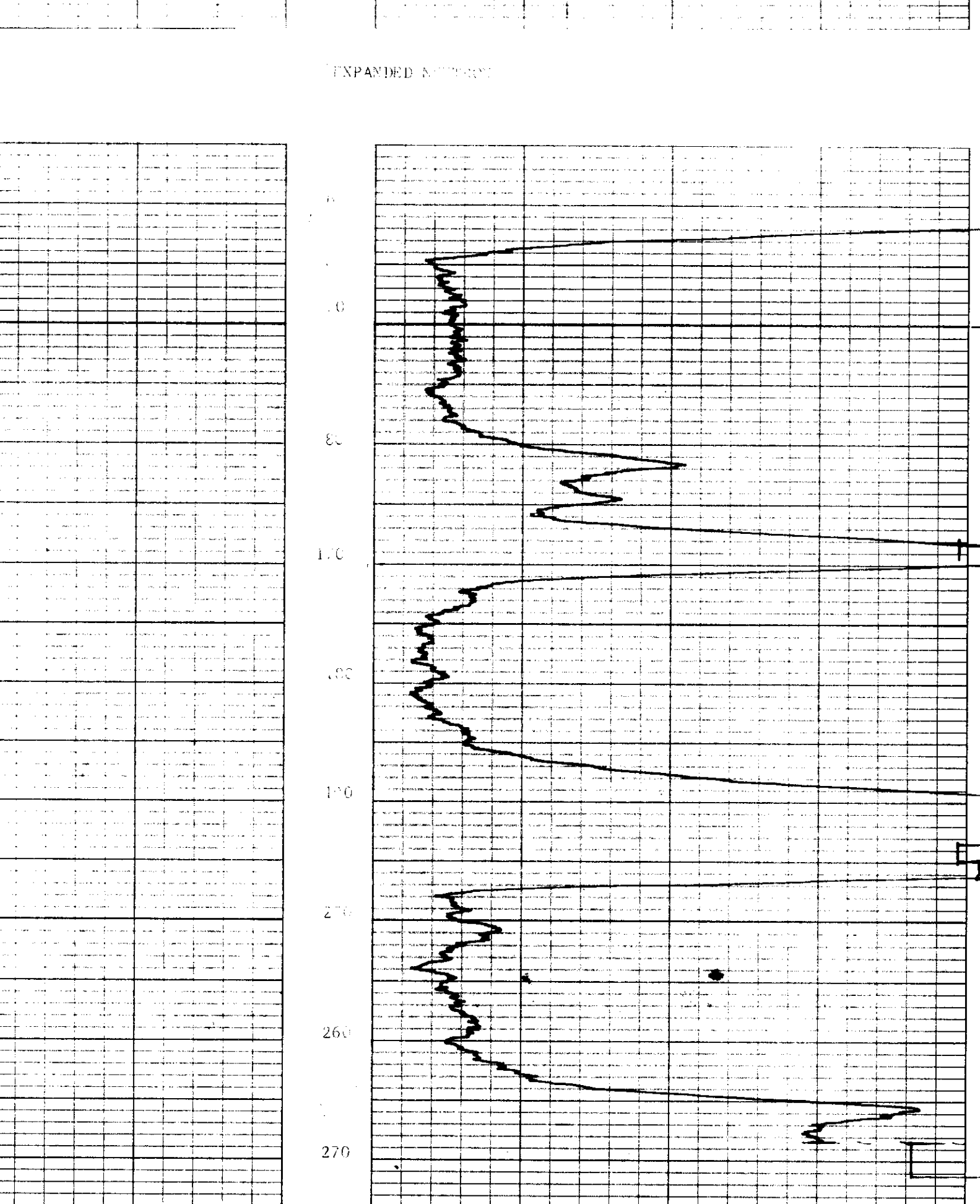
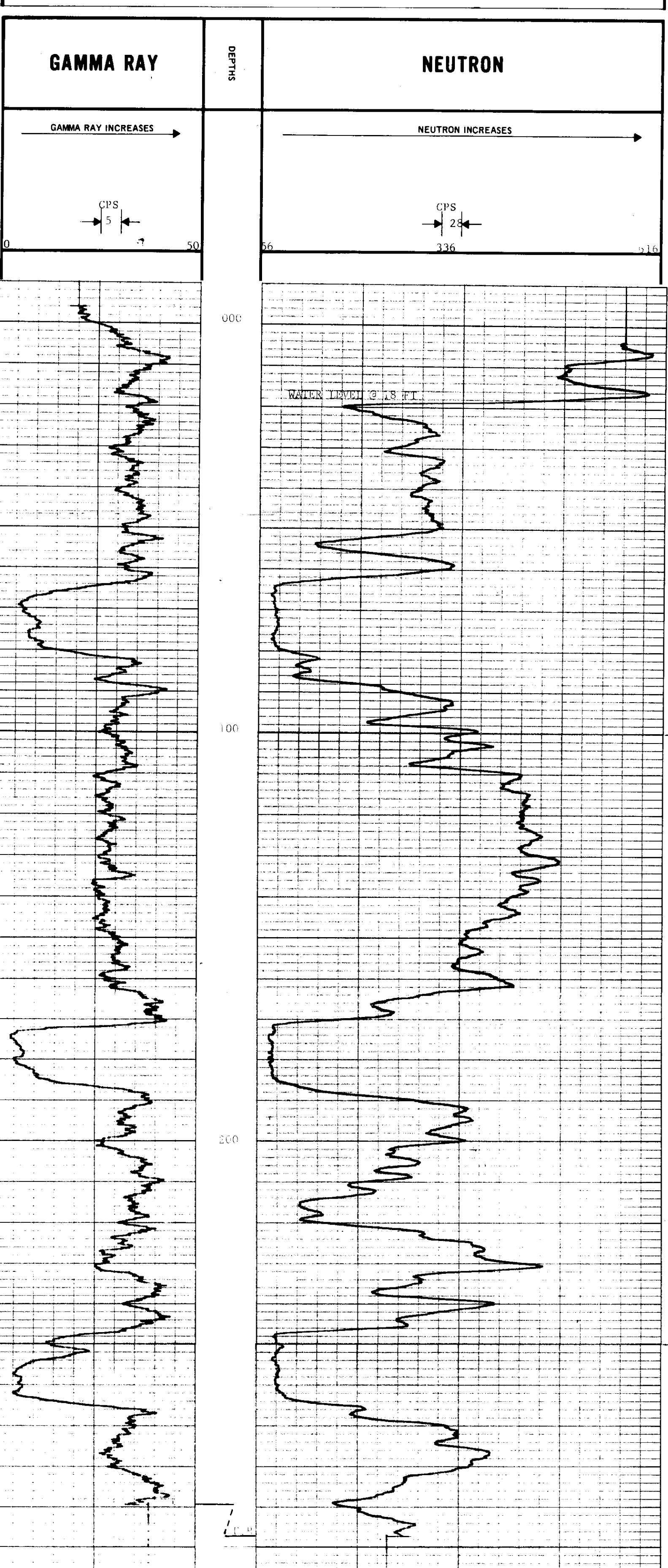
**INVERMOUNT**  
 OIL ENTERPRISES LTD. CALGARY, ALBERTA

NEUTRON LOG

FILE NO.	COMPANY	FORDING COAL LIMITED
LSD	WELL	RH 180
SEC	LOCATION	GREENHILLS
TWP	RGE	
RGE	FIELD	FORDING RIVER
W	PROVINCE	BRITISH COLUMBIA
M		
Permanent Datum	GROUND LEVEL	Elev. _____
Log Measured from	GROUND LEVEL	Ft. Above Perm. Datum _____
Well Depths Measured from		G.L. _____
Run No.	ONE	
Date	7 OCT 70	
First Reading	297	
Last Reading	0	
Footage Logged	297	
Depth Reached	298	
Depth Driller		
Casing Shoe		
Casing Driller		
Fluid Type	WATER	
Liquid Level	48	
Mir. Diam.		
Operating Time	2 HOURS	
Truck No.	20	
Recorded By	PETERSON	Witnessed By
		PETERSON

EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/8	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	1 1/8
TYPE	GEIGER	DETECTOR MODEL NO.	
LENGTH	18 INCH	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	8.55 FT	LENGTH	6 INCH
		SOURCE MODEL NO.	MRC-N-SS-W
		SERIAL NO.	598
		SPACING	19 INCH
		TYPE	AmBe
		STRENGTH	6.94 x 10 <sup>6</sup> N/S

LOGGING DATA											
GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	DEPTHS		SPEED	T.C.	SENS.	ZERO	API G.R. UNITS	T.C.	SENS.	ZERO	API N. UNITS
	FROM	TO	FT/MIN	SEC.	SETTINGS	DIV. L OR R	PER LOG DIV.	SEC.	SETTINGS	DIV. L OR R	PER LOG DIV.
1	0	297	11	4	25	0	5 CPS	4	4	2L	28 CPS



# ROKE

GAMMA RAY NEUTRON LOG

K-FOOTERS 2d3A-1

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	COMPANY	FORDING COAL LIMITED
LSD	WELL	RH 181
SEC	LOCATION	GREENHILLS
TWP	RGE	FORDING RIVER
M	FIELD	FORDING RIVER
PROVINCE	BRITISH COLUMBIA	
Permanent Datum	GROUND LEVEL	Elev. _____
Log Measured from	GROUND LEVEL	Ft. Above Perm. Datum _____
Well Depths Measured from		K.B. _____ D.F. _____ G.L. _____
Run No.	ONE	
Date	26 SEPT 70	
First Reading	194	
Last Reading	0	
Footage Logged	194	
Depth Reached	195	
Depth Driller		
Casing Driller		
Fluid Type	WATER	
Liquid Level	38	
Min. Diam.		
Operating Time	2 HOURS	
Truck No.	20	
Recorded By	PETERSON	Witnessed By PEARSON

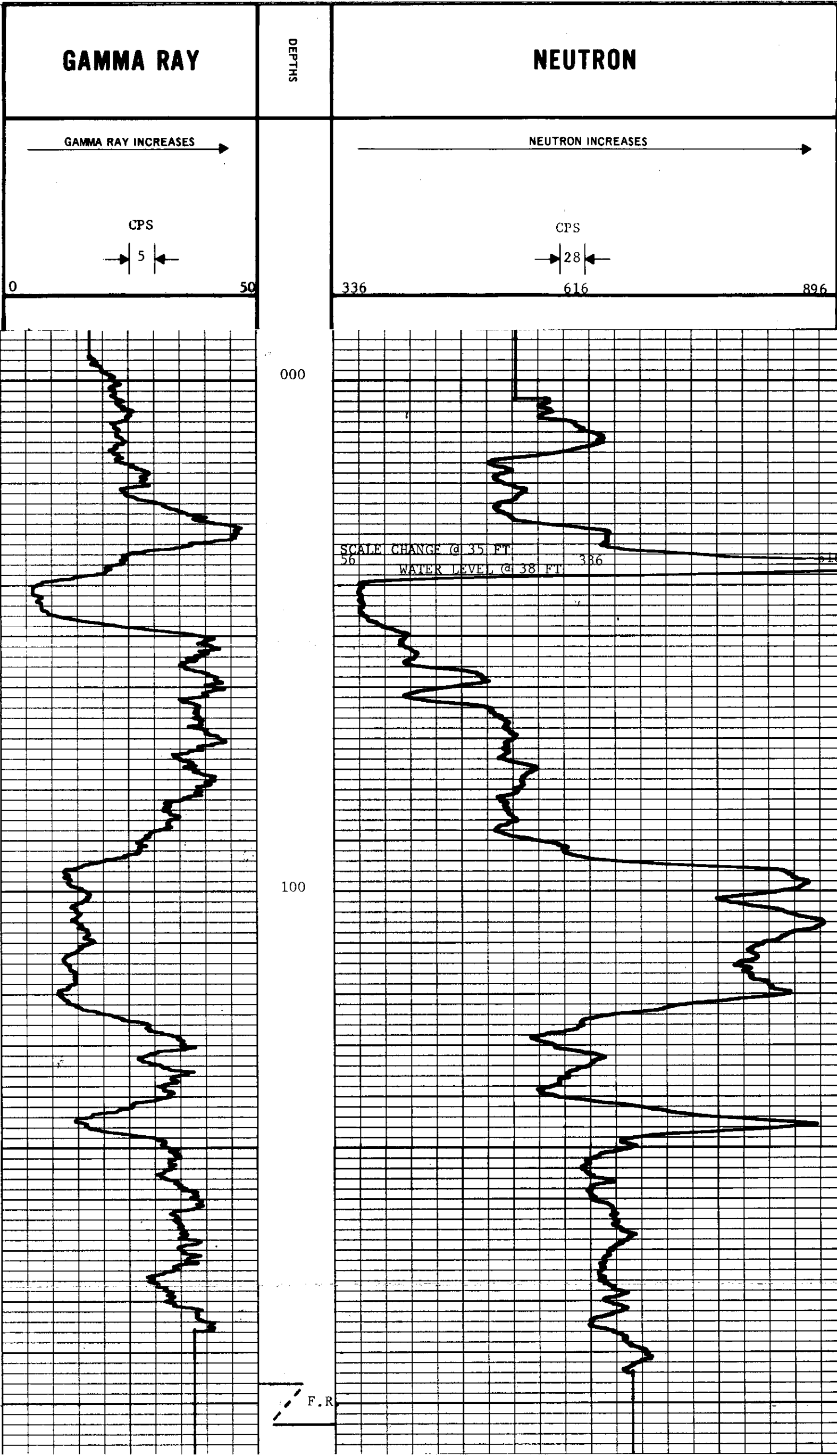
### EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/8	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	1 1/8
TYPE	GEIGER	DETECTOR MODEL NO.	
LENGTH	18 INCH	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	8.55 FT	LENGTH	6 INCH
		SOURCE MODEL NO.	MRC-N-SS-W
		SERIAL NO.	598
HOIST TRUCK NO.	20	SPACING	19 INCH
INSTRUMENT TRUCK NO.		TYPE	AmBe
TOOL SERIAL NO.	CGN27U4A65	STRENGTH	6.94 x 10 <sup>6</sup> N/S

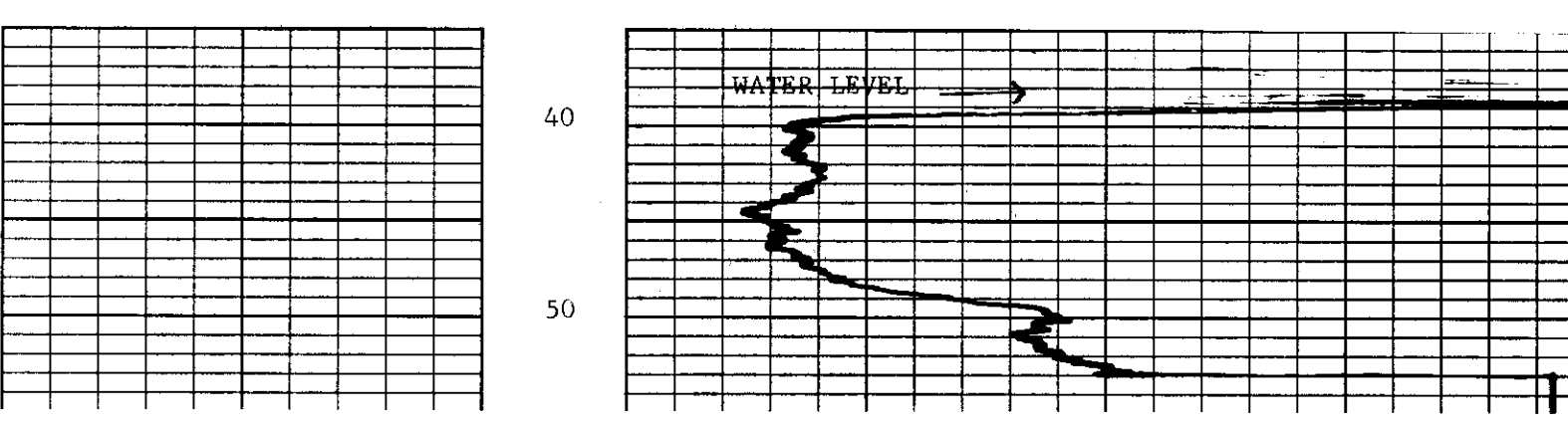
### LOGGING DATA

RUN NO.	GENERAL		GAMMA RAY				NEUTRON				
	FROM	TO	SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
I	0	35	11	4	25	0	5 CPS	4	4	12L	28 CPS
	35	194	11	4	25	0	5 CPS	4	4	2L	28 CPS

REMARKS



### REPEAT SECTIONS - EXPANDED NEUTRON



K-FOCKINGS 70131A-1

# ROKE

## GAMMA RAY NEUTRON LOG

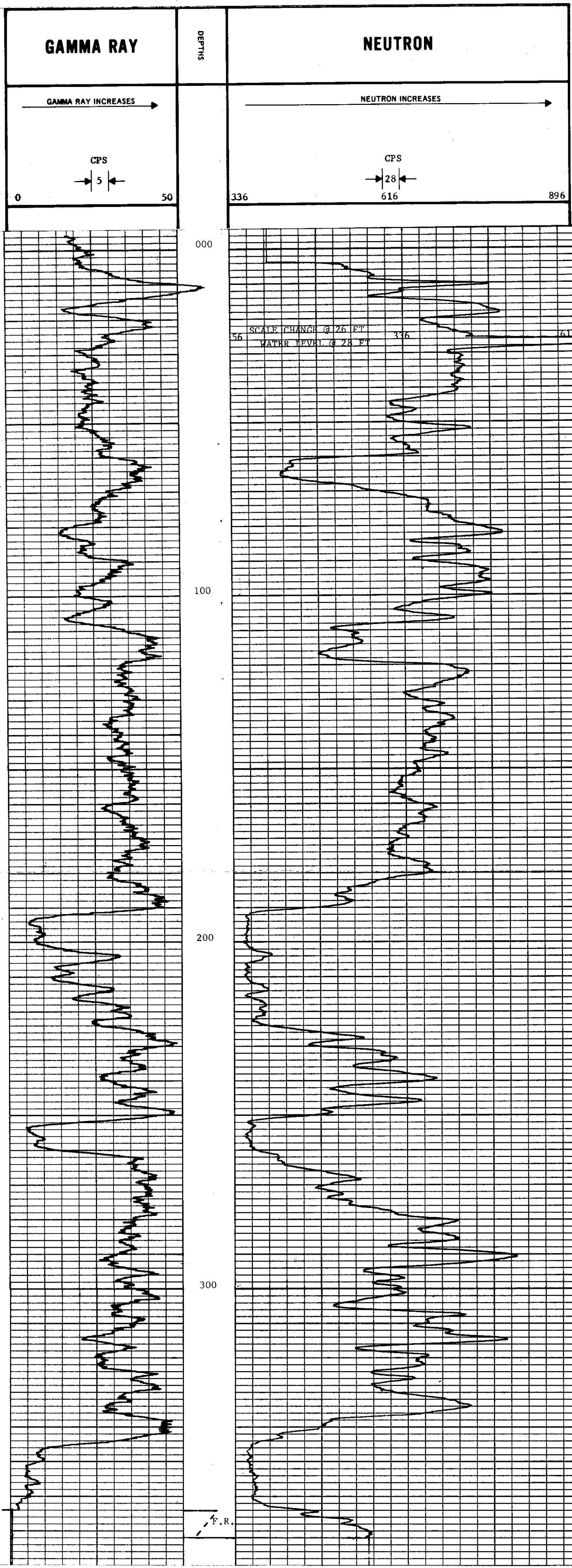
OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	COMPANY	WELL	LOCATION	FIELD	PROVINCE	PARAMOUNT DATUM	LOG MEASURED FROM	WELL DEPTHS MEASURED FROM	K.B.	D.F.	G.L.
LSD	FORDING COAL LIMITED	RH 192	GREENHILLS	FORDING RIVER	BRITISH COLUMBIA	GROUND LEVEL	GROUND LEVEL				
SEC											
TWP											
RGE											
M											
Run No.	ONE	Date	24 SEPT 70	First Reading	372	Last Reading	0	Footage Logged	372	Depth Reached	373
Casing Bore		Casing Driller		Fluid Type	WATER	Liquid Level	28	Mfn. Diam.		Operating Time	2 HOURS
Truck No.	20	Instrument Truck No.		Tool Serial No.	CGN27U4A65	HOIST TRUCK NO.	20	REMARKS	312		
Recorded By	PETERSON	Witnessed By	PETERSON								

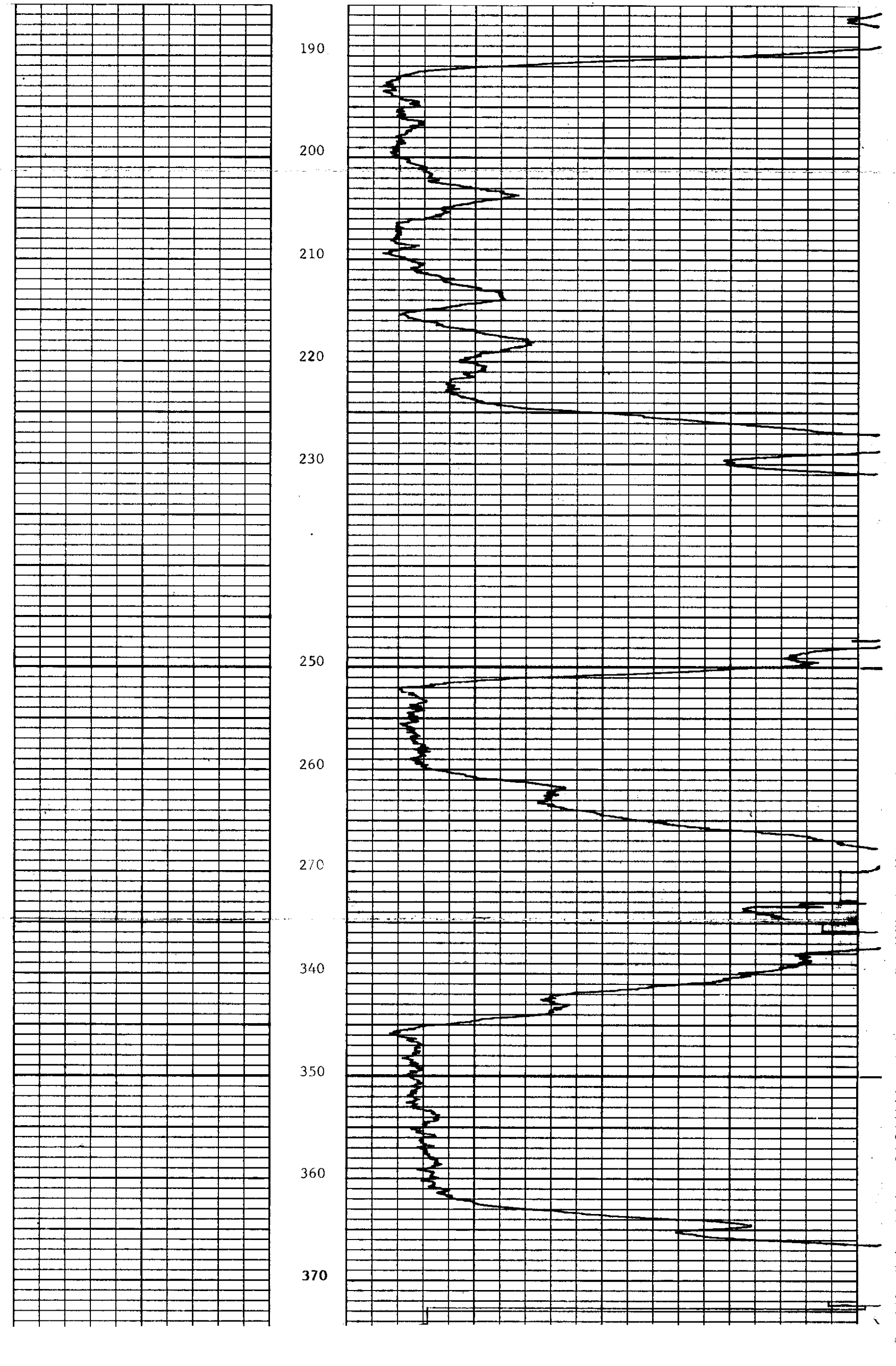
EQUIPMENT DATA					
GAMMA RAY			NEUTRON		
RUN NO.	ONE			RUN NO.	ONE
TOOL MODEL NO.				LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/2			TOOL MODEL NO.	
DETECTOR MODEL NO.	GEIGER			DIAMETER	1 1/2
TYPE	18 INCH			DETECTOR MODEL NO.	
LENGTH	8.55 FT			TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE				LENGTH	6 INCH
				SOURCE MODEL NO.	MRC-N-SS-W
				SERIAL NO.	598
				SPACING	19 INCH
				TYPE	AmBe
				STRENGTH	6.94 x 10 <sup>6</sup> N/S

LOGGING DATA											
GENERAL			GAMMA RAY				NEUTRON				
RUN NO.	DEPTHS		SPEED FT/MIN	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	0	26	11	4	25	0	5 CPS	4	4	12L	28 CPS
	26	372	11	4	25	0	5 CPS	4	4	2L	28 CPS



REPEAT SECTIONS - EXPANDED NEUTRON



K-Fordong 70(S)-A-1

# ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

## GAMMA RAY NEUTRON LOG

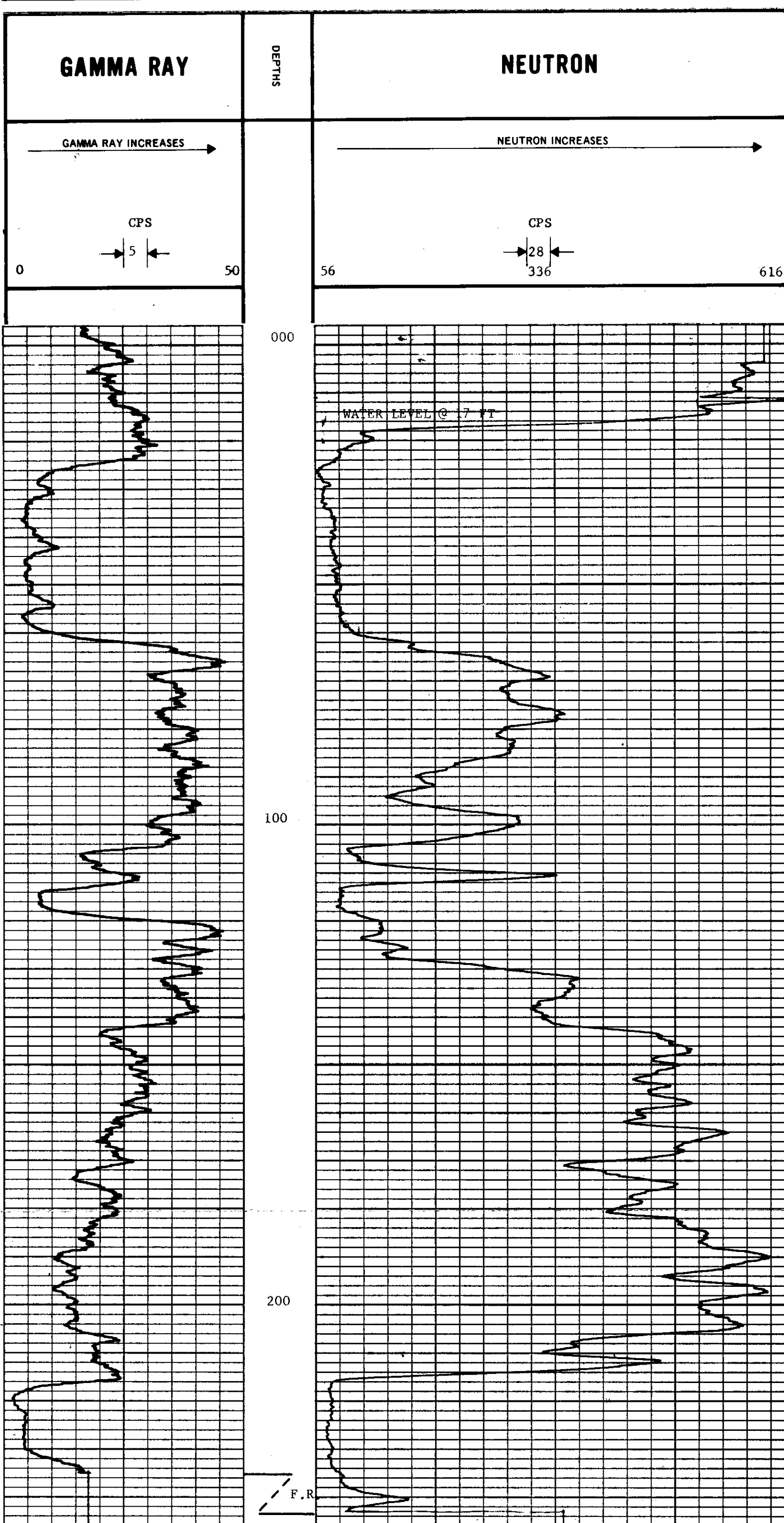
FILE NO.	COMPANY	FORDING COAL LIMITED
LSD	WELL	RB 183
SEC	TWP	GREENHILLS
RGE	LOCATION	
W _____ M	FIELD	FORDING RIVER
	PROVINCE	BRITISH COLUMBIA
Permanent Datum	GROUND LEVEL	Elev. _____
Log Measured from	GROUND LEVEL	Fl. Above Perm. Datum _____
Well Depths Measured from		G.L. _____
Run No.	ONE	
Date	24 SEPT 70	
First Reading	243	
Last Reading	0	
Footage Logged	243	
Depth Reached	244	
Depth Driller		
Casing Driller		
Fluid Type	WATER	
Liquid Level	17	
Min. Diam.		
Operating Time	2 HOURS	
Truck No.	20	
Recorded By	PETERSON	Witnessed By
		PEARSON

312

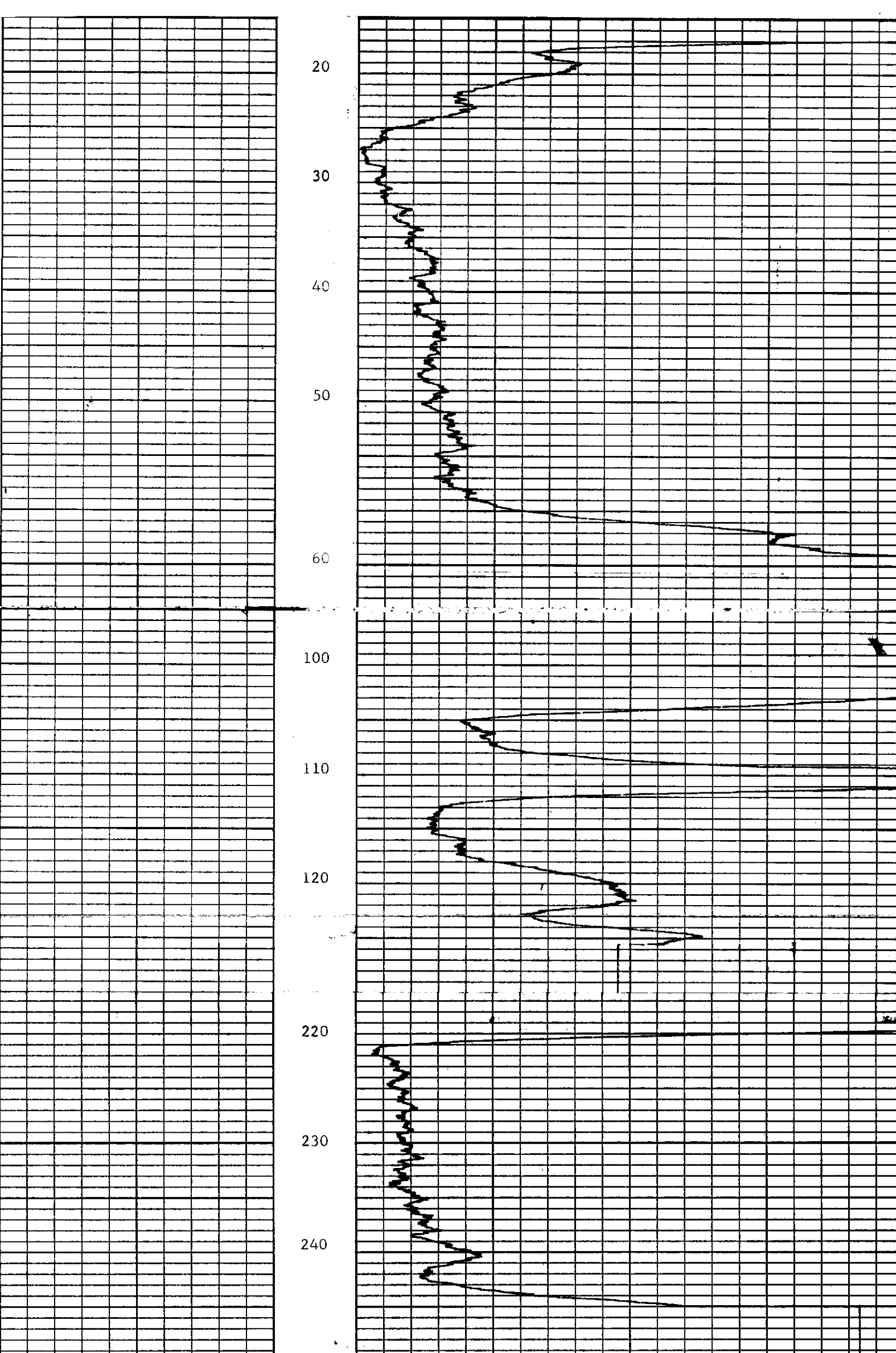
EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/8	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	1 1/8
TYPE	GEIGER	DETECTOR MODEL NO.	
LENGTH	18 INCH	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	8.55 FT	LENGTH	6 INCH
		SOURCE MODEL NO.	MRC-N-SS-W
		SERIAL NO.	598
HOIST TRUCK NO.	20	SPACING	19 INCH
INSTRUMENT TRUCK NO.		TYPE	AmBe
TOOL SERIAL NO.	CGN27U4A65	STRENGTH	6.94 x 10 <sup>6</sup> N/S

LOGGING DATA											
RUN NO.	GENERAL DEPTHS		SPEED FT/MIN	T.C. SEC.	GAMMA RAY			NEUTRON			
	FROM	TO			SENS. SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	0	243	11	4	25	0	5 CPS	4	4	21	28 CPS
REMARKS											



REPEAT SECTIONS - EXPANDED NEUTRON



K-FORMING 70(3)A-1

# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO. COMPANY FORDING COAL LIMITED

WELL RH 184

LOCATION GREENHILLS

FIELD FORDING RIVER

PROVINCE BRITISH COLUMBIA

Permanent Datum GROUND LEVEL Elev. \_\_\_\_\_ K.B. \_\_\_\_\_

Log Measured from GROUND LEVEL Ft. Above Perm. Datum D.F. \_\_\_\_\_

Well Depths Measured from \_\_\_\_\_ G.L. \_\_\_\_\_

Run No. ONE

Date 24 SEPT 70

First Reading 303

Last Reading 0

Footage Logged 303

Depth Reached 304

Depth Driller \_\_\_\_\_

Casing Driller \_\_\_\_\_

Fluid Type WATER

Liquid Level 44

Mfn. Diam. \_\_\_\_\_

Operating Time 2 HOURS

Truck No. 20

Recorded By PETERSON

Witnessed By PEARSON

312

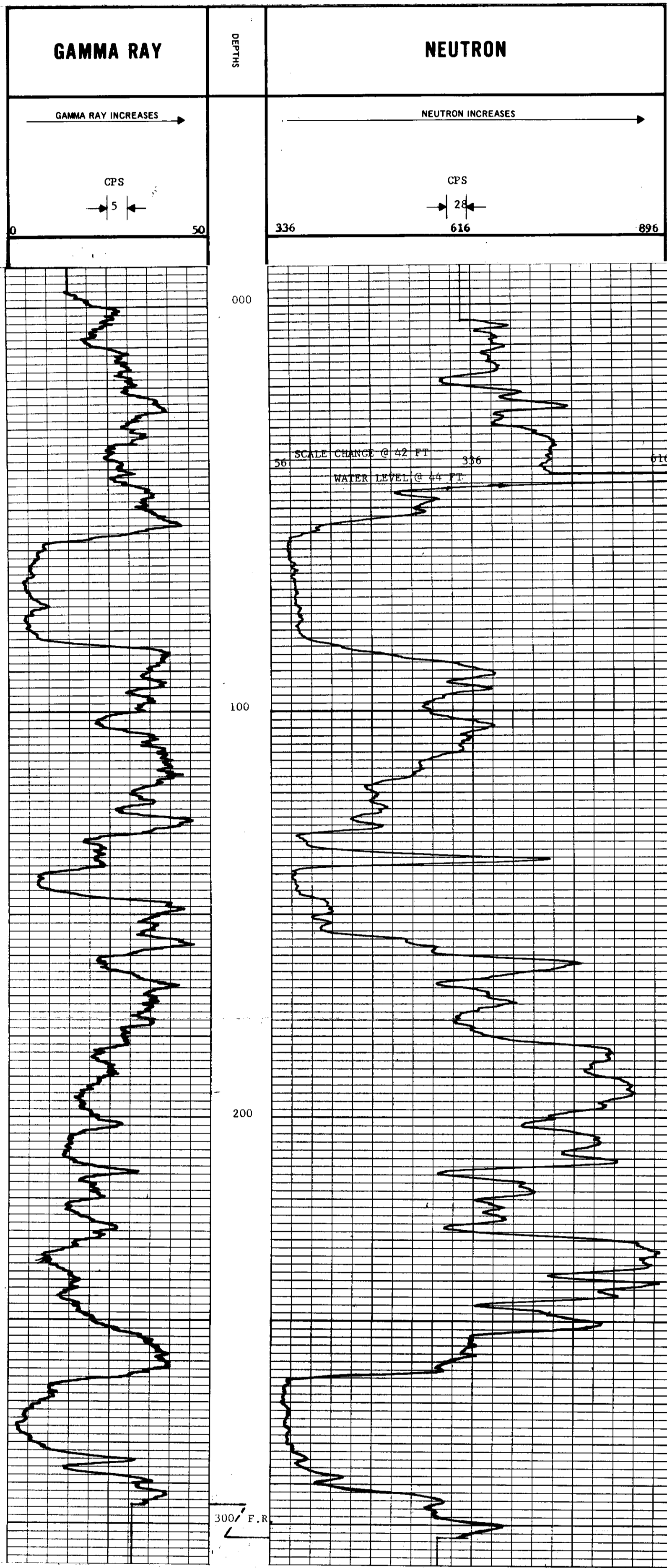
EQUIPMENT DATA

GAMMA RAY				NEUTRON			
Run No.	ONE			Run No.	ONE		
Tool Model No.				Log Type	NEUTRON/NEUTRON		
Diameter	1 1/2			Tool Model No.			
Detector Model No.				Diameter	1 1/2		
Type	GEIGER			Detector Model No.			
Length	18 INCH			Type	PROPORTIONAL		
Distance to N. Source	8.55 FT			Length	6 INCH		
GENERAL				Source Model No.	MRC-N-SS-W		
Hoist Truck No.	10			Serial No.	598		
Instrument Truck No.				Spacing	19 INCH		
Tool Serial No.	CGN27U4A65			Type	AmBe		
				Strength	6.94 x 10 <sup>6</sup> N/S		

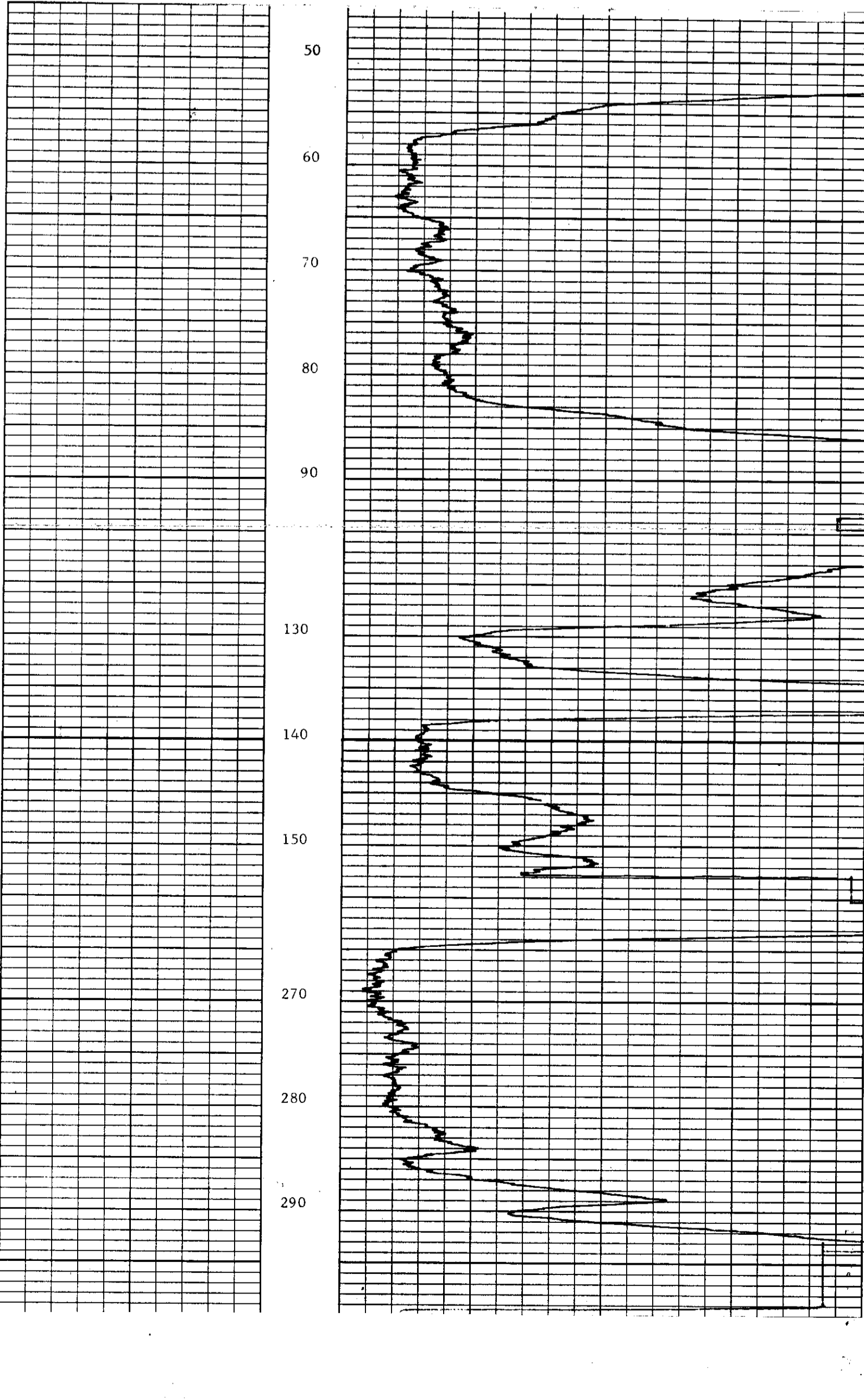
LOGGING DATA

Run No.	GENERAL DEPTHS		SPEED FT/MIN	T.C. SEC.	GAMMA RAY			T.C. SEC.	SENS. SETTINGS	NEUTRON			
	FROM	TO			ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	ZERO DIV. L OR R			API N. UNITS PER LOG DIV.			
1	0	42	11	4	25	0	5	CPS	4	4	12L	28	CPS
	42	303	11	4	25	0	5	CPS	4	4	2L	28	CPS

REMARKS



REPEAT SECTIONS - EXPANDED NEUTRON





# ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

K-Foreings 72(3)A-1

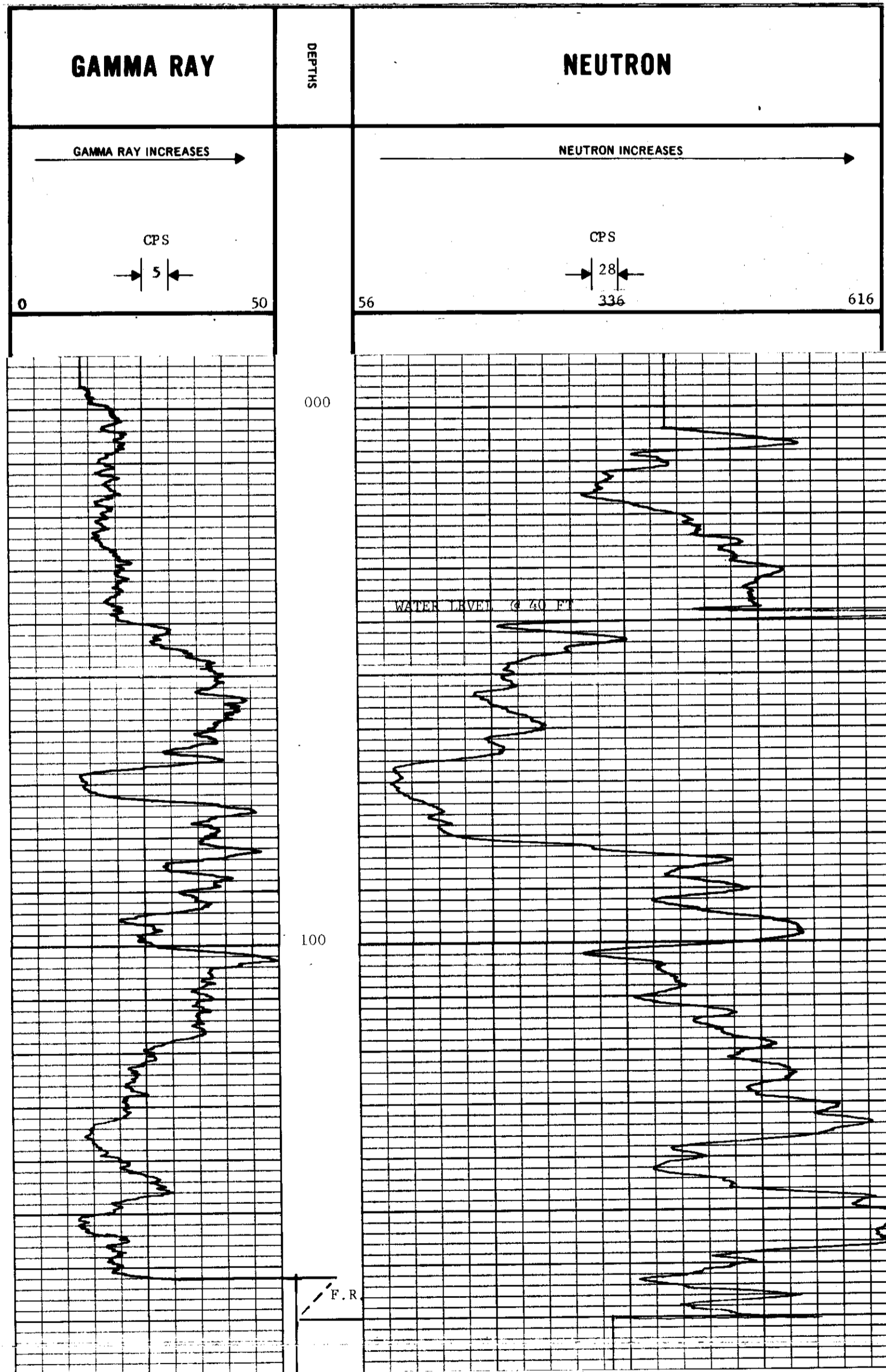
FILE NO.	COMPANY	FORDING COAL LIMITED
LSD	WELL	RH 185
SEC	LOCATION	GREENHILLS
TWP	RGE	FORDING RIVER
M	PROVINCE	BRITISH COLUMBIA
Permanent Datum	GROUND LEVEL	Elev. _____
Log Measured from	GROUND LEVEL	Ft. Above Perm. Datum _____
Well Depths Measured from		K.B. _____ D.F. _____ G.L. _____
Run No.	ONE	
Date	14 SEPT 70	
First Reading	170	
Last Reading	0	
Footage Logged	170	
Depth Reached	171	
Depth Driller		
Casing Roke		
Casing Driller		
Fluid Type	WATER	
Liquid Level	40	
Min. Diam.		
Operating Time	2 HOURS	
Truck No.	20	
Recorded By	PETERSON	Witnessed By
		BRADY

312

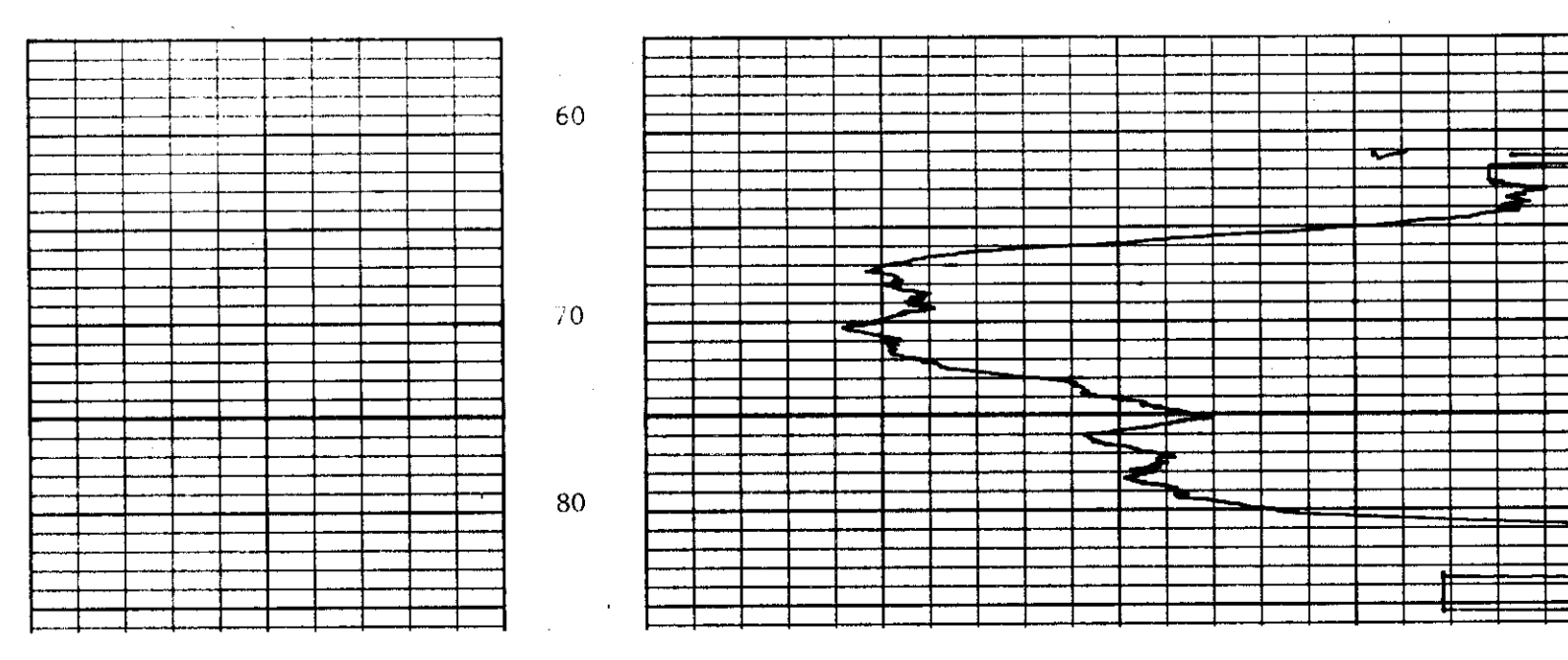
EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/2	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	1 1/2
TYPE	GEIGER	DETECTOR MODEL NO.	
LENGTH	18 INCH	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	8.55 FT	LENGTH	6 INCH
		SOURCE MODEL NO.	MRC-N-SS-W
		SERIAL NO.	598
HOIST TRUCK NO.	20	SPACING	19 INCH
INSTRUMENT TRUCK NO.		TYPE	AmBe
TOOL SERIAL NO.	CGN27U4A65	STRENGTH	6.94 x 10 <sup>6</sup> N/S

LOGGING DATA											
RUN NO.	DEPTHS		SPEED FT/MIN	T.C. SEC.	GAMMA RAY			NEUTRON			
	FROM	TO			ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.	
1	000	170	11	4	25	0	5 CPS	4	4	2L	28 CPS

REMARKS



REPEAT SECTIONS - EXPANDED NEUTRON



# ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

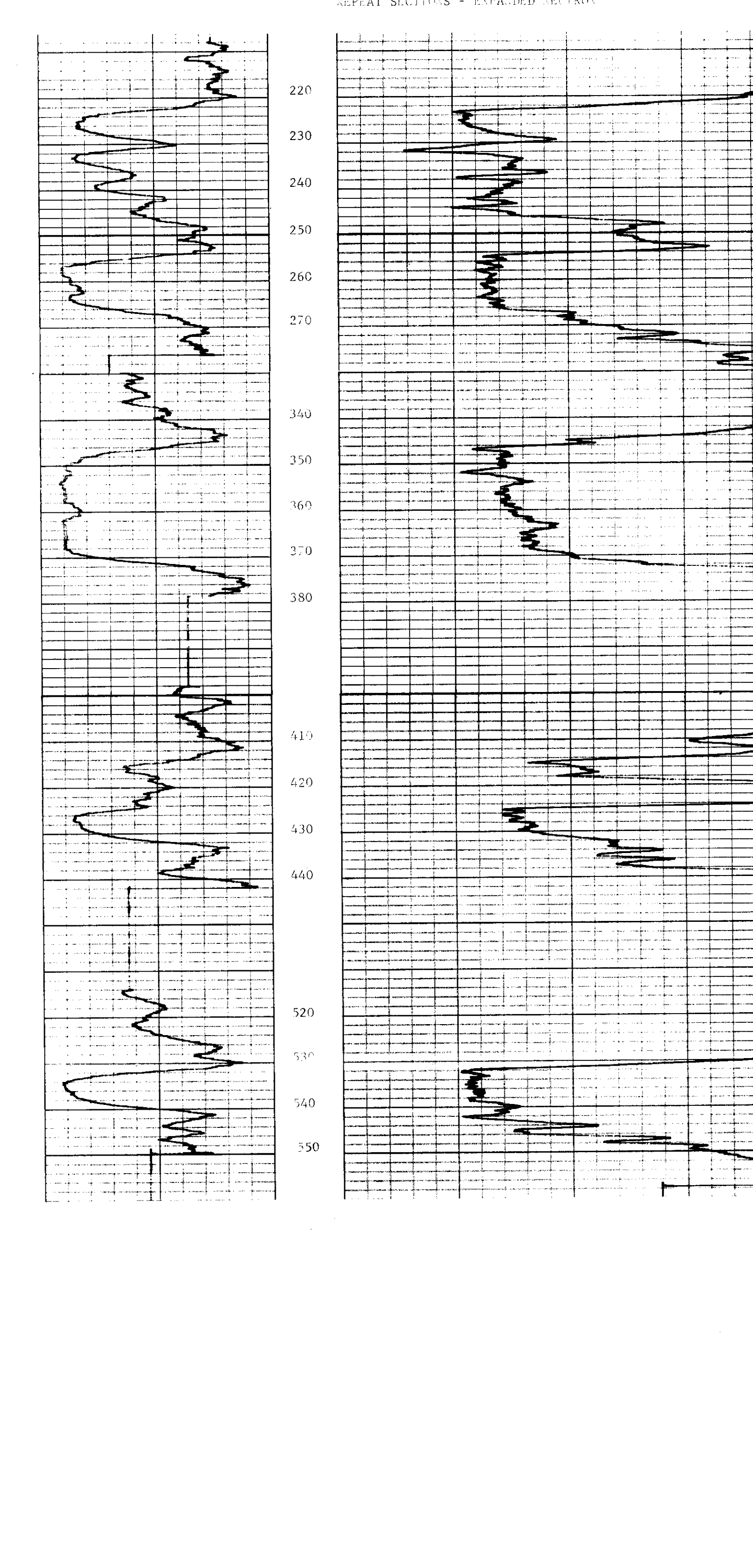
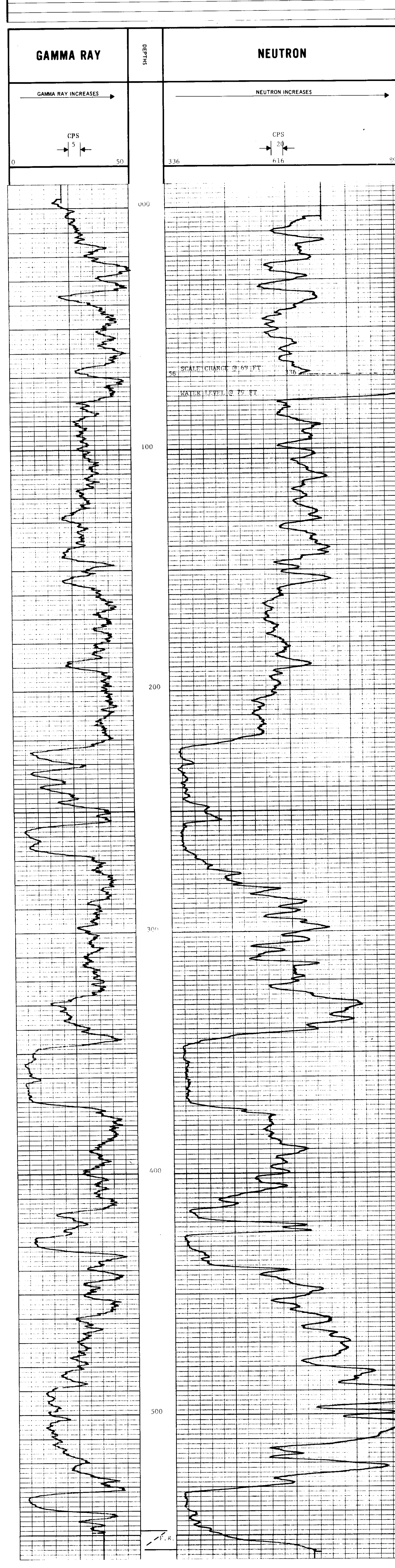
K-FOOTING 7013A-1

FILE NO.	COMPANY	WELL	LOCATION	FIELD	PROVINCE
LSD	FORBING COAL LIMITED	R1 186	GREENHILLS	FORDING RIVER	BRITISH COLUMBIA
SEC					
TWP					
RGE					
N					
W					
M					
Permanent Datum	PROVINCIAL LEVEL	Elev.	K.B.		
Log Measured from	(KAMOND LEVEL)	Ft. Above Perm. Datum	D.F.		
Well Depths Measured from		G.L.			
Run No.	ONE	Date			
First Reading	7:20				
Last Reading	0				
Footage Logged	536				
Depth Reached	537				
Depth Driller					
Casing Driller					
Fluid Type	WATER				
Liquid Level	79				
Min. Diam.					
Operating Time	3 HOURS				
Truck No.	20				
Recorded By	PETERSON	Witnessed By	PARSON		

EQUIPMENT DATA					
GAMMA RAY			NEUTRON		
RUN NO.	ONE			RUN NO.	ONE
TOOL MODEL NO.				LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/8			TOOL MODEL NO.	
DETECTOR MODEL NO.	GEIGER			DIAMETER	1 1/8
TYPE	18 INCH			DETECTOR MODEL NO.	
LENGTH	8.55 FT			TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE				LENGTH	6 INCH
				SOURCE MODEL NO.	MRC-N-SS-W
				SERIAL NO.	590
HOIST TRUCK NO.	20			SPACING	19 INCH
INSTRUMENT TRUCK NO.				TYPE	AmBe
TOOL SERIAL NO.	CGR2714A65			STRENGTH	6.94 x 10 <sup>6</sup> N/S

LOGGING DATA											
GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	DEPTHS	SPEED	T.C.	SENS	ZERO	API GR. UNITS	T.C.	SENS	ZERO	API N. UNITS	
NO.	FROM	FT/MIN	SEC.	SETTINGS	DIV L OR R	PER LOG DIV	SEC.	SETTINGS	DIV L OR R	PER LOG DIV.	
1	000	69	11	4	25	0	4	4	12L	28 cps	
	69	556	11	4	25	0	4	4	2L	28 cps	
	REPEAT SECTIONS - EXPANDED NEUTRON										
			11	4	25	0	4	10	50L		
REMARKS: R.P. AT SECT. 0.5 RUN W/ E 12' NGE SPAC NG. D. ALA 160											



# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO. COMPANY **FORDING COAL LIMITED**

WELL **R.H. # 107**

LOCATION **GREEN HILLS**

FIELD **FORDING RIVER**

PROVINCE **BRITISH COLUMBIA**

Permanent Datum: **SEA LEVEL** Elev. Above Perm. Datum

Log Measured from: **SEA LEVEL** Ft. Above Perm. Datum

Well Depths Measured from: **SEA LEVEL** G.L.

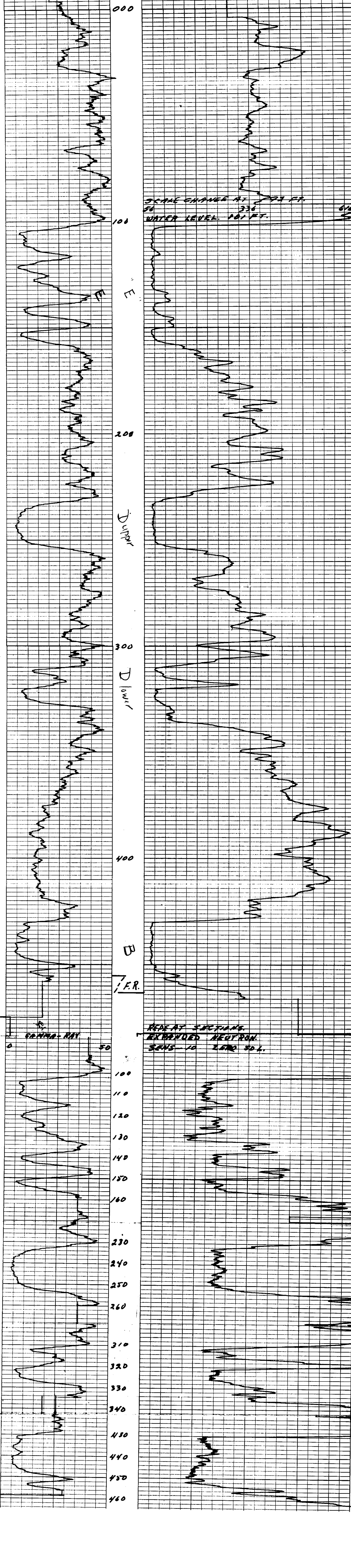
Run No.	<b>ONE</b>
Date	<b>25 APR 1950</b>
First Reading	<b>483</b>
Last Reading	<b>000</b>
Footage Logged	<b>413</b>
Depth Reached	<b>424</b>
Depth Driller	<b>425</b>
Casing Hole	<b>—</b>
Casing Diameter	<b>—</b>
Fluid Type	<b>WATER</b>
Liquid Level	<b>101 FT.</b>
Min. Diam.	<b>—</b>
Operating Time	<b>3 HRS</b>
Track No.	<b>20</b>

**312**

EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	<b>ONE</b>	RUN NO.	<b>ONE</b>
TOOL MODEL NO.	<b>—</b>	LOG TYPE	<b>NEUTRON/NEUTRON</b>
DIAMETER	<b>1 1/2</b>	TOOL MODEL NO.	<b>—</b>
DETECTOR MODEL NO.	<b>—</b>	DIAMETER	<b>1 1/2</b>
TYPE	<b>GEIGER</b>	DETECTOR MODEL NO.	<b>—</b>
LENGTH	<b>18 INCH</b>	TYPE	<b>PROPORTIONAL</b>
DISTANCE TO N. SOURCE	<b>8.55 FT</b>	LENGTH	<b>6 INCH</b>
GENERAL		SOURCE MODEL NO.	<b>MRC-N-SS-W</b>
HOIST TRUCK NO.	<b>220</b>	SERIAL NO.	<b>598</b>
INSTRUMENT TRUCK NO.	<b>—</b>	SPACING	<b>12 INCH</b>
TOOL SERIAL NO.	<b>66N2704665</b>	TYPE	<b>AmBe</b>
		STRENGTH	<b>6.94 x 10<sup>6</sup> N/S</b>

LOGGING DATA										
GENERAL			GAMMA RAY				NEUTRON			
RUN NO.	DEPTHS FROM	TO	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API GR UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N UNITS PER LOG DIV.
1	000	92	4	25	0	5 CPS	4	4	12L	28 CPS
	92	463	4	25	0	5 CPS	4	4	2L	28 CPS
<b>REPEAT SECTIONS (EXPANDED NEUTRON)</b>										
		11	4	25	0	5 CPS	4	10	30L	

REMARKS: **REPEAT SECTIONS RUN WITH 12 INCH SPACING. DIAL AT 160.**



REPEAT SECTIONS. EXPANDED NEUTRON. SENS - 10 ZERO 50 L.

Recorded by **PETERSON** Witnessed by **PEARSON**

K- Foxcocks 2013/A-1

# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO. COMPANY **FORAMS CON. LIMITED**

LSD SEC WELL **RH 109**

TWP LOCATION **GREEK HILLS**

RGE FIELD **FORAMS RIVER**

W PROVINCE **BRITISH COLUMBIA**

Permittent Depth **6000 LEVEL** Elev. **5000** H.B. **5000**

Log measured from **6000 LEVEL** Fl. Above **5000** Datum **5000** D.F. **5000**

Well Depths measured from **5000** G.L. **5000**

Run No. **TWD**

Date **18 DEC 20**

First Reading **174**

Last Reading **174**

Footage Logged **174**

Depth Reached **174**

Depth Driller **180**

Casing Rate

Casing Driller

Fluid Type **MUD**

Liquid Level **PULL**

Min. Diam.

Operating Time **2 HRS**

Truck No. **10**

Recorded By **BANKS**

Witnessed By **TOTEN**

**312**

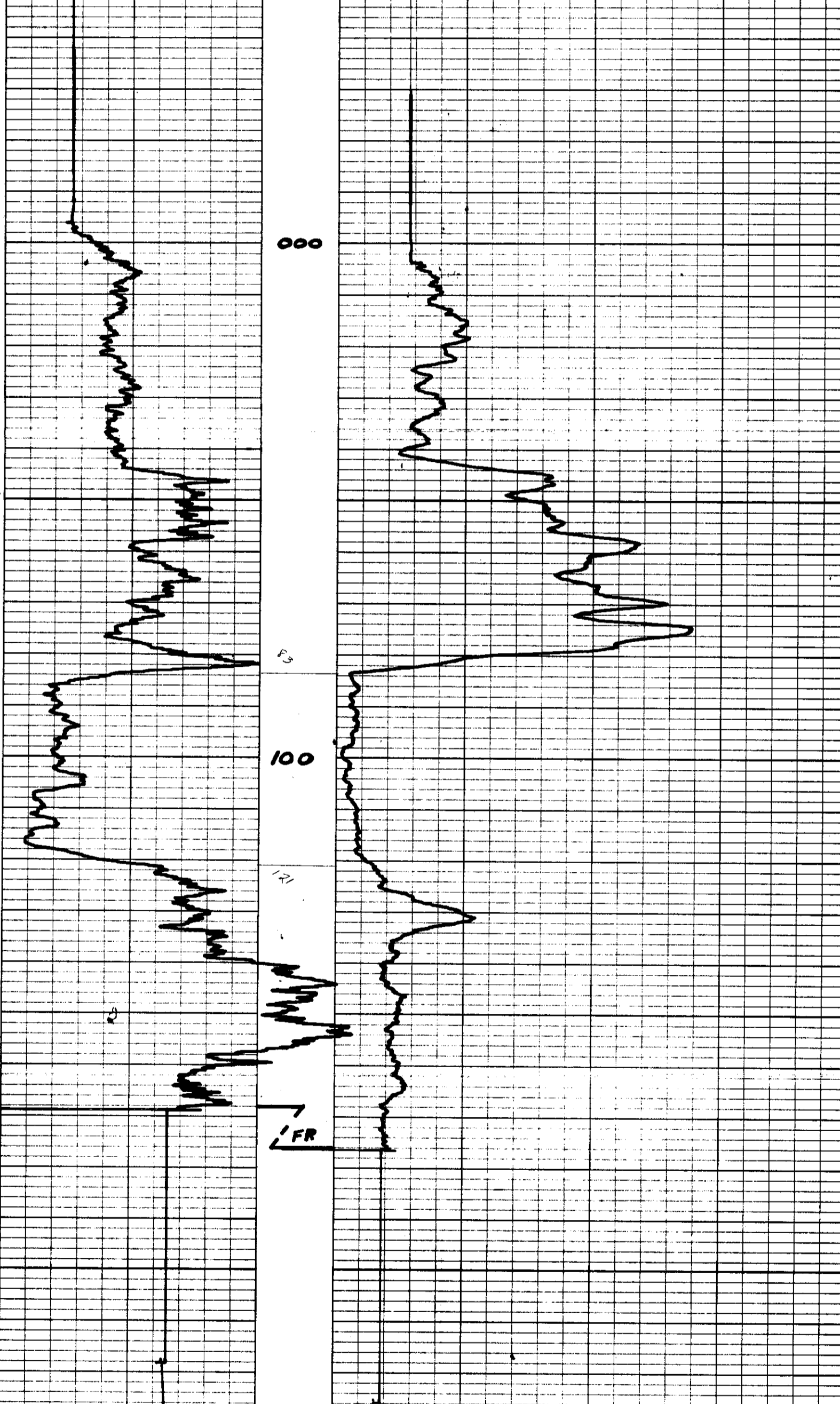
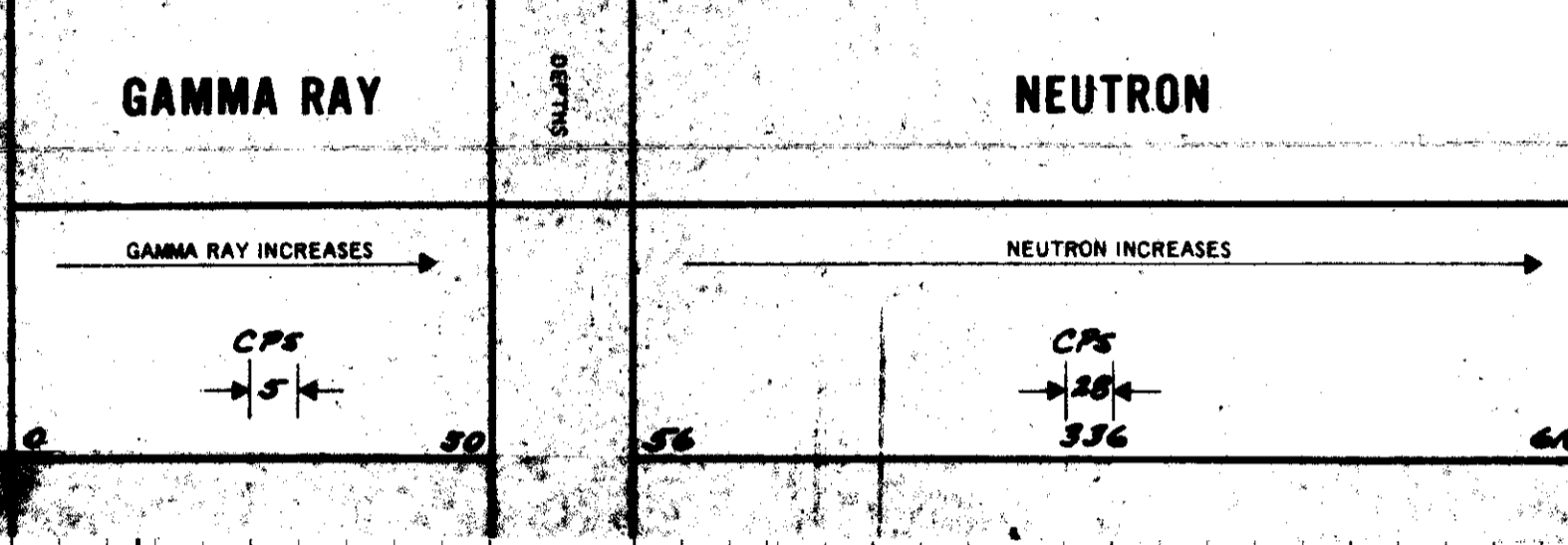
### EQUIPMENT DATA

GAMMA RAY				NEUTRON			
RUN NO.	<b>ONE</b>			RUN NO.	<b>ONE</b>		
TOOL MODEL NO.				LOG TYPE	<b>NEUTRON/NEUTRON</b>		
DIAMETER	<b>1 1/2</b>			TOOL MODEL NO.			
DETECTOR MODEL NO.				DIAMETER	<b>1 1/2</b>		
TYPE	<b>GEIGER</b>			DETECTOR MODEL NO.			
LENGTH	<b>18 INCH</b>			TYPE	<b>PROPORTIONAL</b>		
DISTANCE TO N. SOURCE	<b>8.55 FT</b>			LENGTH	<b>6 INCH</b>		
GENERAL				SOURCE MODEL NO.	<b>MRC-N-SS-W</b>		
HOIST TRUCK NO.	<b>10</b>			SERIAL NO.	<b>606</b>		
INSTRUMENT TRUCK NO.				SPACING	<b>19 INCH</b>		
TOOL SERIAL NO.	<b>CON 27448 78</b>			TYPE	<b>AmBe</b>		
				STRENGTH	<b>7.00x10<sup>6</sup> N/S</b>		

### LOGGING DATA

RUN NO.	GENERAL DEPTHS		SPEED FT/MIN	T.C. SEC.	GAMMA RAY			NEUTRON			
	FROM	TO			ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.	
<b>1</b>	<b>0</b>	<b>174</b>	<b>11</b>	<b>3</b>	<b>25</b>	<b>0L</b>	<b>5 CPS</b>	<b>11</b>	<b>4.2</b>	<b>26</b>	<b>28 CPS</b>

REMARKS **0**



K-156021-5 701310-1

# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	COMPANY	FORDING COAL LIMITED
LSD	WELL	RH91 (WATER WELL)
SEC	TWP	21 191
RGE	LOCATION	GREENHILLS
W	FIELD	FORDING RIVER
M	PROVINCE	BRITISH COLUMBIA
Permanent Datum	GROUND LEVEL	Elev. _____
Log Measured from	GROUND LEVEL	Fl. Above Perm. Datum _____
Well Depths Measured from		K.S. _____
		D.F. _____
		G.L. _____
Run No.	ONE	
Date	7 OCT 70	
First Reading	274	
Last Reading	0	
Footage Logged	274	
Depth Reached	275	
Depth Driller		
Casing Role		
Casing Driller		
Fluid Type	WATER	
Liquid Level	32	
Min. Diam.		
Operating Time	2 HOURS	
Truck No.	20	
Recorded By	PETERSON	Witnessed By
		PEARSON

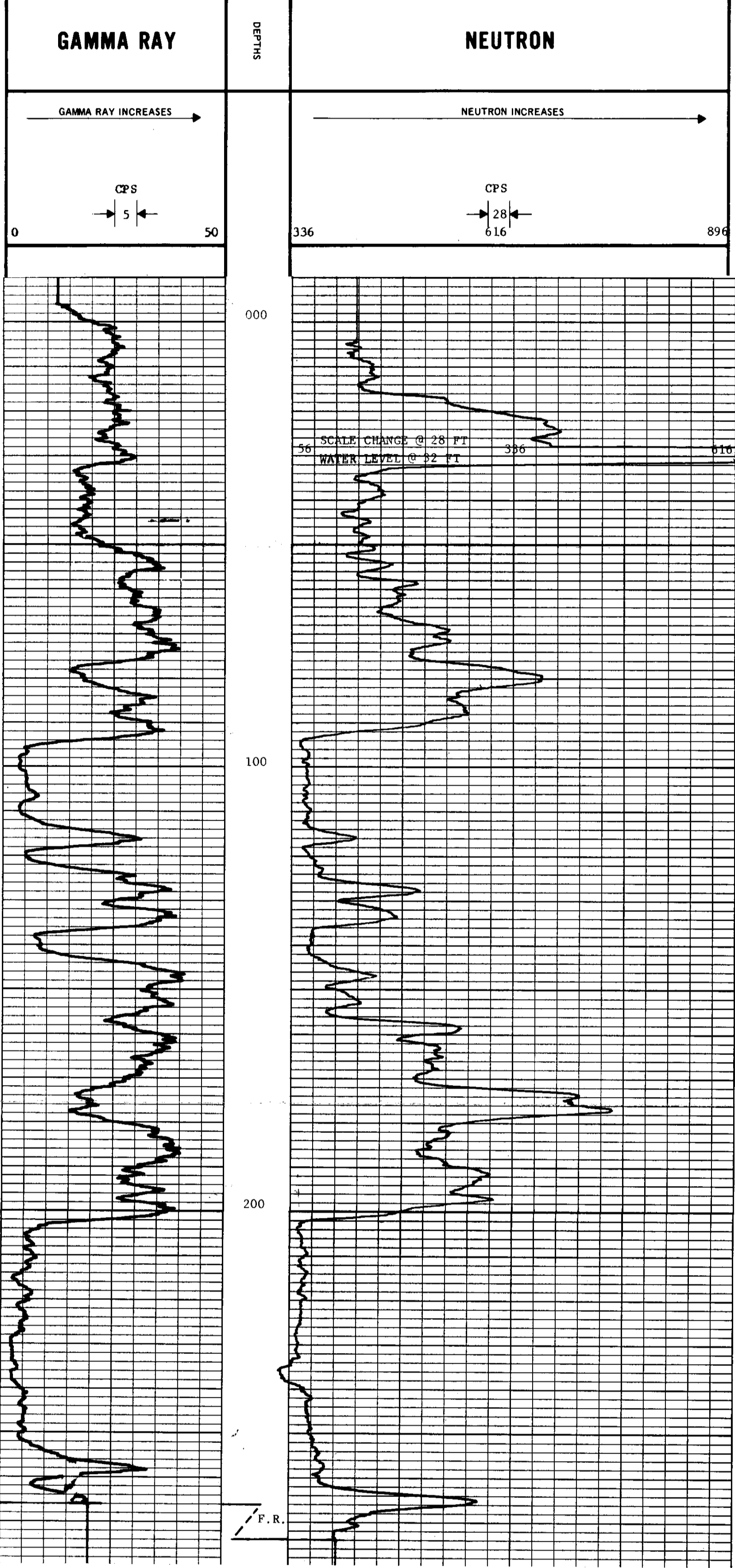
312

EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/8	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	1 1/8
TYPE	GEIGER	DETECTOR MODEL NO.	
LENGTH	18 INCH	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	8.55 FT	LENGTH	6 INCH
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	598
HOIST TRUCK NO.	20	SPACING	19 INCH
INSTRUMENT TRUCK NO.		TYPE	AmBe
TOOL SERIAL NO.	CGN27U4A65	STRENGTH	6.94 x 10 <sup>6</sup> N/S

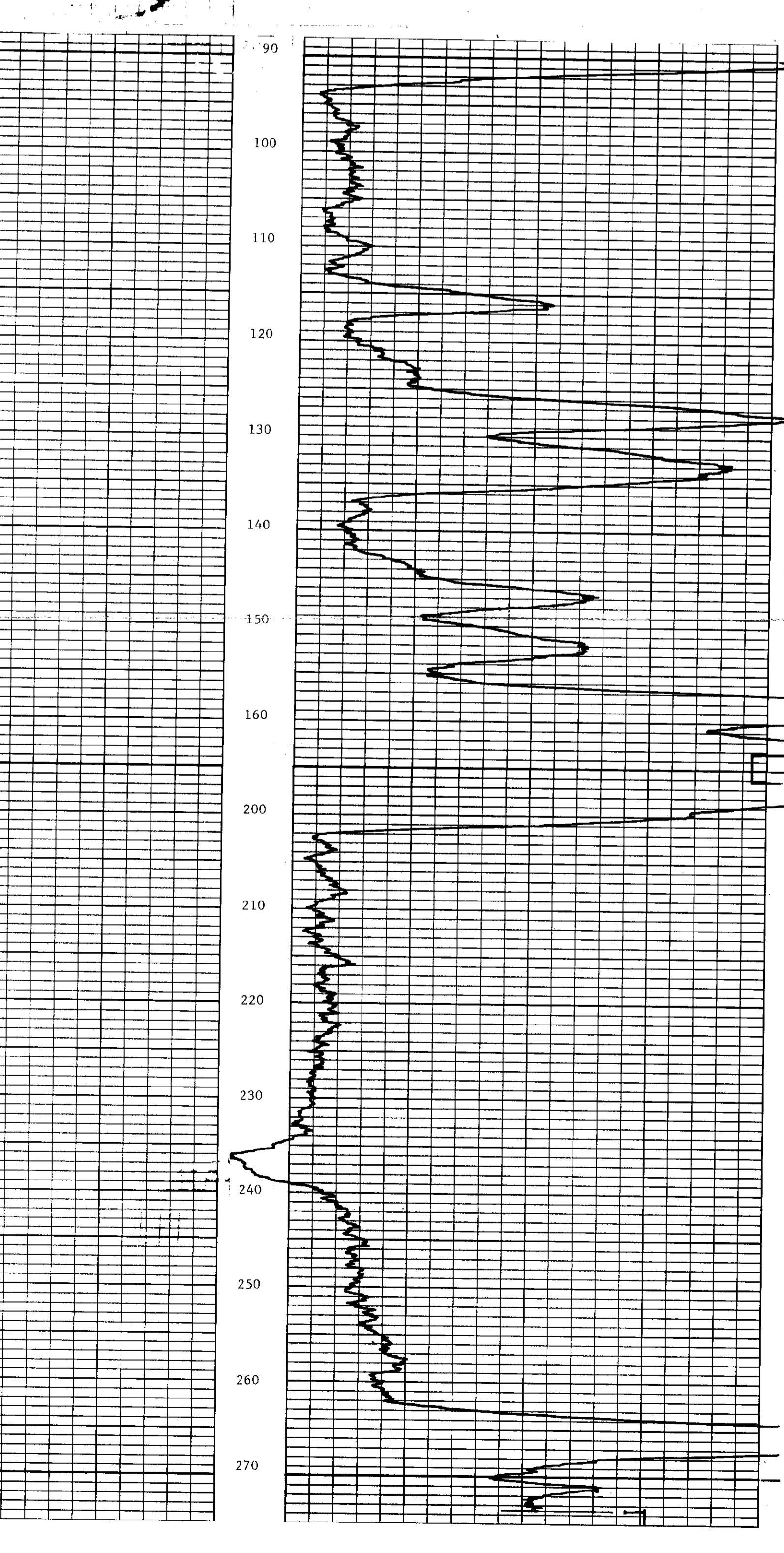
  

LOGGING DATA											
GENERAL			GAMMA RAY				NEUTRON				
RUN NO.	DEPTHS		SPEED	T.C.	SENS.	ZERO	API G.R.	T.C.	SENS.	ZERO	API N. UNITS
	FROM	TO	FT/MIN	SEC.	SETTINGS	DIV. L OR R	PER LOG DIV.	SEC.	SETTINGS	DIV. L OR R	PER LOG DIV.
1	0	28	11	4	25	0	5 CPS	4	4	12L	28 CPS
	28	274	11	4	25	0	5 CPS	4	4	2L	28 CPS

REMARKS



EXPANDED NEUTRON



W  
K. FREEMING 76(3)A-1

# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

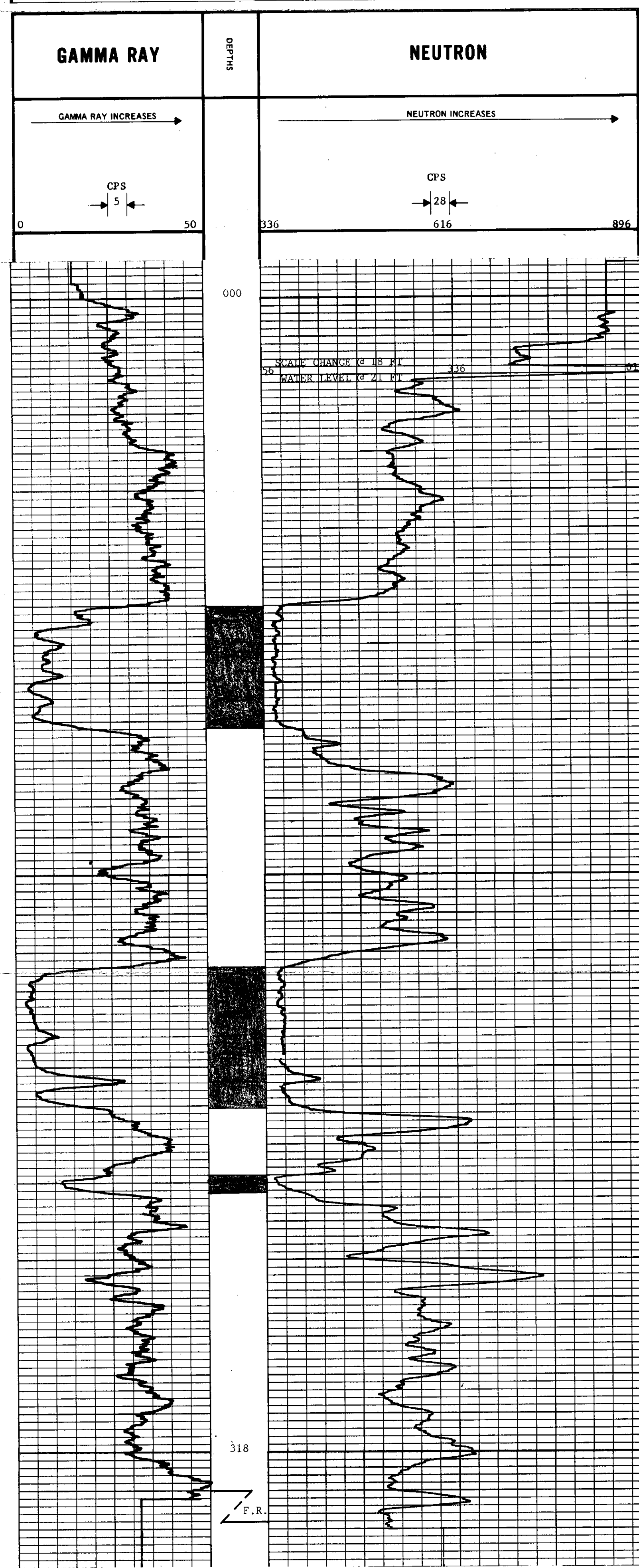
FILE NO.	COMPANY	FORDING COAL LIMITED
WELL	WELL	RH 192
LOCATION	LOCATION	GREENHILLS
RGE	RGE	FORDING RIVER
W	W	M
FIELD	FIELD	FORDING RIVER
PROVINCE	PROVINCE	BRITISH COLUMBIA
Permanent Datum	GROUND LEVEL	Elev. _____
Log Measured from	GROUND LEVEL	Fl. Above Perm. Datum _____
Well Depths Measured from	_____	C.L. _____
Run No.	ONE	
Date	15 OCT 70	
First Reading	318	
Last Reading	0	
Footage Logged	318	
Depth Reached	319	
Depth Driller		
Casing Driller		
Casing Role		
Liquid Level	WATER	
Mm. Diam.	21	
Operating Time	2 HOURS	
Truck No.	20	
Recorded By	PETERSON	Witnessed By
		PETERSON

**312**

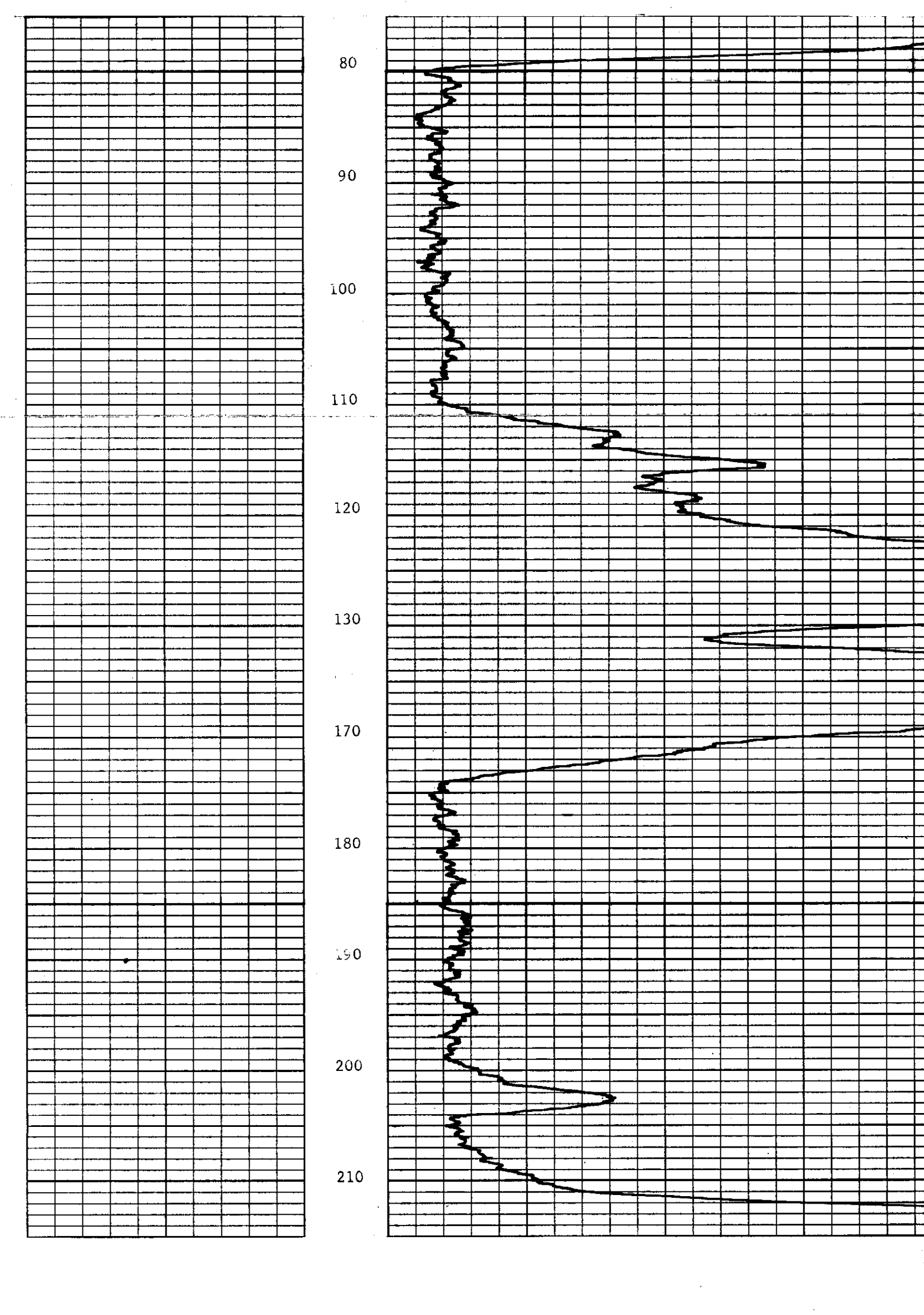
EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/2	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	1 1/2
TYPE	GEIGER	DETECTOR MODEL NO.	
LENGTH	18 INCH	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	8.55 FT	LENGTH	6 INCH
		SOURCE MODEL NO.	MRC-N-SS-W
		SERIAL NO.	598
HOIST TRUCK NO.	20	SPACING	19 INCH
INSTRUMENT TRUCK NO.		TYPE	AmBe
TOOL SERIAL NO.	CGN27U4A65	STRENGTH	6.94 x 10 <sup>6</sup> N/S

LOGGING DATA										
GENERAL		GAMMA RAY			NEUTRON					
RUN NO.	DEPTHS	SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	0 TO 18	11	4	25	0	5 CPS	4	4	12L	28 CPS
	18 TO 318	11	4	25	0	5 CPS	4	4	2L	28 CPS



REPEAT SECTIONS EXPANDED NEUTRON



# ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

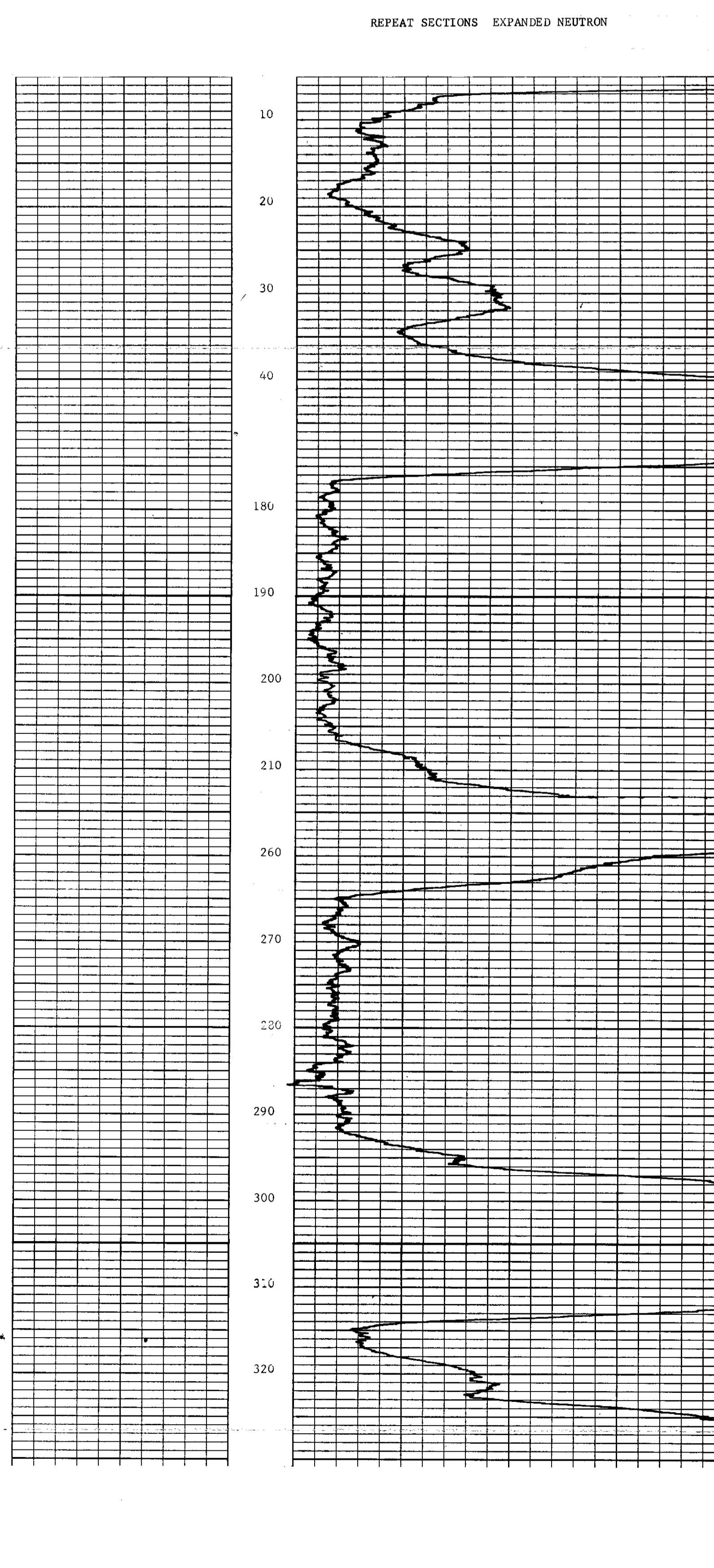
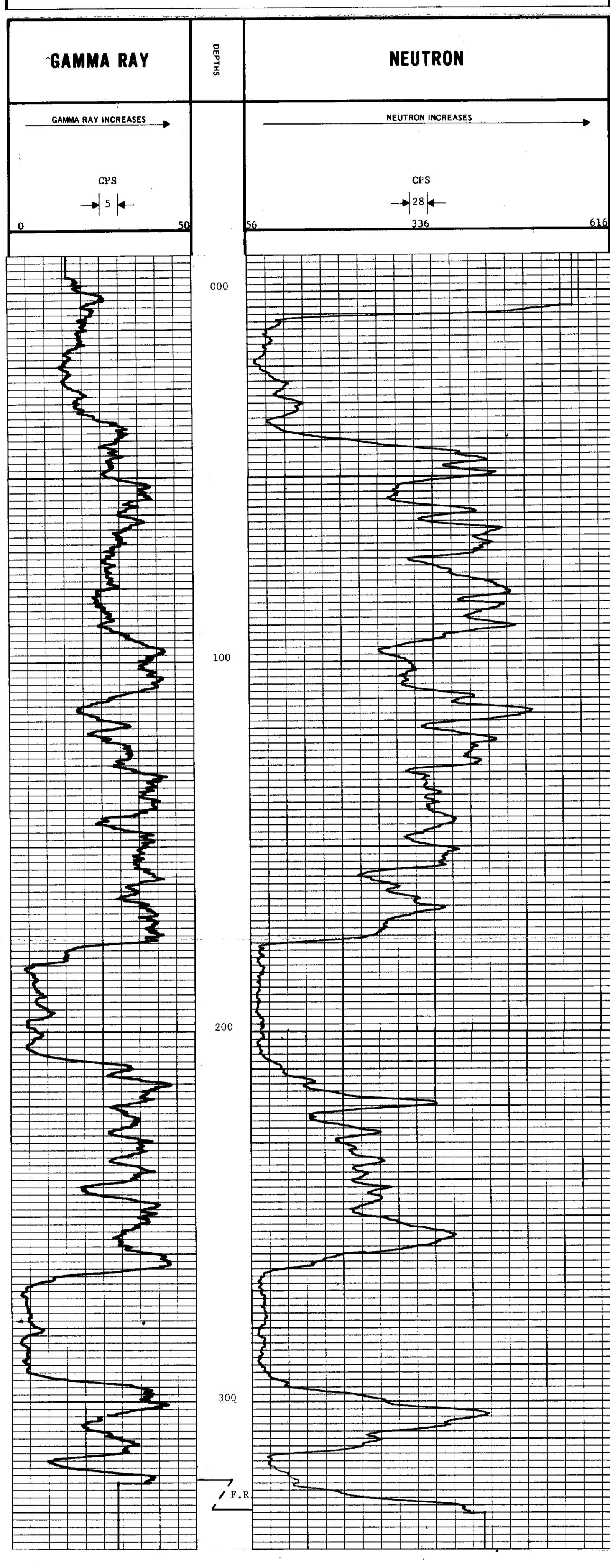
K-FOOTAGE 2613A-1

FILE NO.	COMPANY	FORDING COAL LIMITED
LSD	WELL	RI 193
SEC	LOCATION	GREENHILLS
TWP	RGE	
RGE	FIELD	FORDING RIVER
W		
M	PROVINCE	BRITISH COLUMBIA
	Permanent Datum	GROUND LEVEL
	Log Measured from GROUND LEVEL	Elev. _____ Ft. Above Perm. Datum
	Well Depths Measured from	K.B. _____ D.F. _____ G.L. _____
Run No.	ONE	
Date	15 OCT 70	
First Reading	329	
Last Reading	0	
Footage Logged	329	
Depth Reached	330	
Depth Driller		
Casing Role		
Casing Driller		
Fluid Type	WATER	
Liquid Level	6	
Min. Diam.		
Operating Time	2 HOURS	
Truck No.	20	
Recorded By	PETERSON	Witnessed By
		PEARSON

EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/8	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	1 1/8
TYPE	GEIGER	DETECTOR MODEL NO.	
LENGTH	18 INCH	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	8.55 FT	LENGTH	6 INCH
		SOURCE MODEL NO.	MRC-N-SS-W
		SERIAL NO.	598
GENERAL		SPACING	19 INCH
HOIST TRUCK NO.	20	TYPE	AmBe
INSTRUMENT TRUCK NO.		STRENGTH	6.94 x 10 <sup>6</sup> N/S
TOOL SERIAL NO.	CGN27U4A65		

LOGGING DATA											
GENERAL			GAMMA RAY				NEUTRON				
RUN NO.	DEPTHS		SPEED	T.C.	SENS.	ZERO	API G.R. UNITS	T.C.	SENS.	ZERO	API N. UNITS
	FROM	TO	FT/MIN	SEC.	SETTINGS	DIV. L OR R	PER LOG DIV.	SEC.	SETTINGS	DIV. L OR R	PER LOG DIV.
1	0	329	11	4	25	0	5 CPS	4	4	2L	28 CPS



K-Forming 70(3)A1-1

# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

COMPANY **EDBING CORP LIMITED**

WELL **RH/PT**

LOCATION **GREENHILLS**

FIELD **FORBING RIVER**

PROVINCE **BRITISH COLUMBIA**

Permanent Datum **CROWN LEVEL** Elev. \_\_\_\_\_

Log Measured from **CROWN LEVEL** Ft. Above Perm. Datum \_\_\_\_\_

Well Depths Measured from \_\_\_\_\_

FILE NO. \_\_\_\_\_

LSD \_\_\_\_\_

SEC \_\_\_\_\_

TWP \_\_\_\_\_

RGE \_\_\_\_\_

W \_\_\_\_\_ M \_\_\_\_\_

Run No. **ONE**

Date **18 OCT. 1970**

First Reading **158**

Last Reading **000**

Footage Logged **157**

Depth Reached **160**

Depth Driller \_\_\_\_\_

Casing Rone \_\_\_\_\_

Casing Driller \_\_\_\_\_

Fluid Type **WATER**

Liquid Level **21 FT**

Min. Dam. \_\_\_\_\_

Operating Time **2 HRS**

Truck No's **20**

Recorded By **PETERSON**

Witnessed By **PETERSON**

# 312

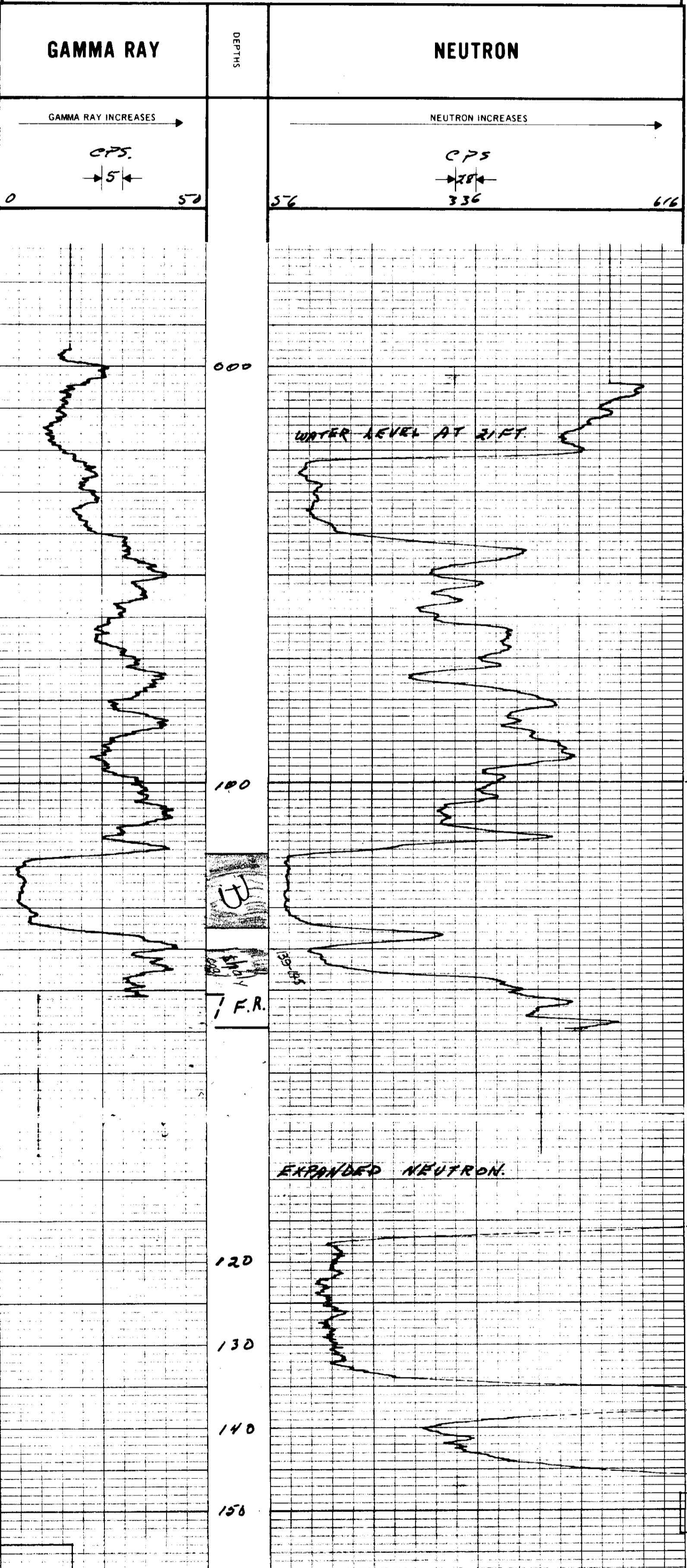
### EQUIPMENT DATA

GAMMA RAY				NEUTRON			
RUN NO	<b>ONE</b>			RUN NO	<b>ONE</b>		
TOOL MODEL NO				LOG TYPE	<b>NEUTRON/NEUTRON</b>		
DIAMETER	<b>1 1/8</b>			TOOL MODEL NO			
DETECTOR MODEL NO				DIAMETER	<b>1 1/8</b>		
TYPE	<b>GEIGER</b>			DETECTOR MODEL NO			
LENGTH	<b>18 INCH</b>			TYPE	<b>PROPORTIONAL</b>		
DISTANCE TO N SOURCE	<b>8.55 FT</b>			LENGTH	<b>6 INCH</b>		
GENERAL				SOURCE MODEL NO.	<b>MRC-N-SS-W</b>		
HOIST TRUCK NO	<b>20</b>			SERIAL NO	<b>588</b>		
INSTRUMENT TRUCK NO				SPACING	<b>19 INCH</b>		
TOOL SERIAL NO	<b>CCN2704865</b>			TYPE	<b>AmBe</b>		
				STRENGTH	<b>6.94 x 10<sup>6</sup> N/S</b>		

### LOGGING DATA

RUN NO	DEPTHS		SPEED FT/MIN	GAMMA RAY				NEUTRON			
	FROM	TO		T C SEC	SENS SETTINGS	ZERO DIV L OR R	API GR UNITS PER LOG DIV	T C SEC	SENS SETTINGS	ZERO DIV L OR R	API N UNITS PER LOG DIV
1	000	157	11	4	25	0	5 CPS	4	4	26	28 CPS

REMARKS





# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

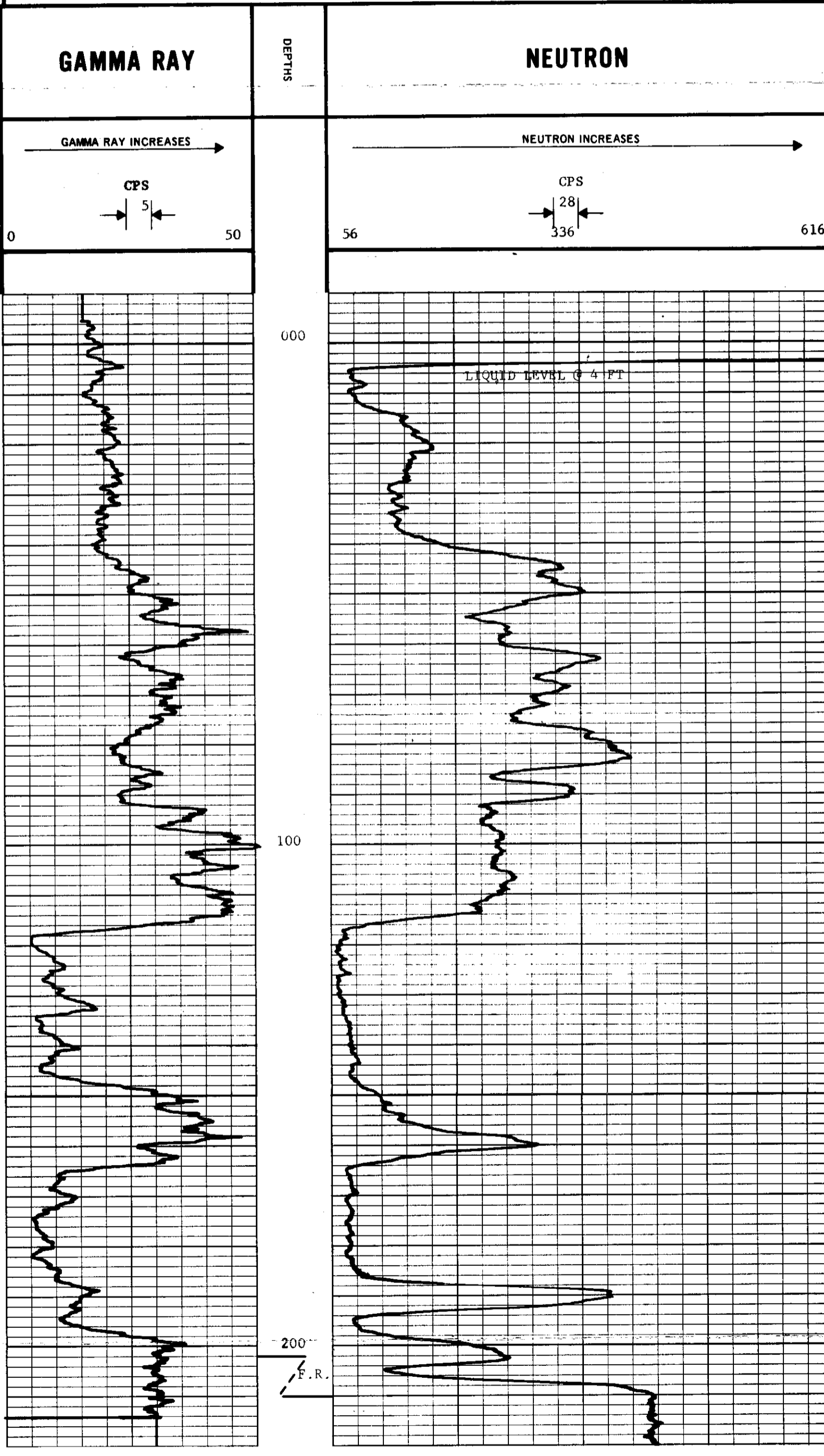
K-Fordings 20(3)A-1

FILE NO.	COMPANY	FORGING COAL LIMITED
LSD	WELL	RH 195
SEC	TWP	GREENHILLS
RGE	FIELD	FORGING RIVER
W	M	PROVINCE
		BRITISH COLUMBIA
Permanent Datum	GROUND LEVEL	Elev.
Log Measured from	GROUND LEVEL	Ft. Above Perm. Datum
Well Depths Measured from		G.L.
Run No.	ONE	
Date	17 DEC 70	
First Reading	210	
Last Reading	0	
Footage Logged	210	
Depth Reached	211	
Depth Driller	235	
Casting Role		
Casting Driller		
Fluid Type	MUD	
Liquid Level	4	
Min. Diam.		
Operating Time	2 HOURS	
Truck No.	10	
Recorded By	HANKS	Witnessed By
		PEARSON

312

EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/2	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	1 1/2
TYPE	GEIGER	DETECTOR MODEL NO.	
LENGTH	18 INCH	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	8.55 FT	LENGTH	6 INCH
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	606
HOIST TRUCK NO	10	SPACING	19 INCH
INSTRUMENT TRUCK NO		TYPE	AmBe
TOOL SERIAL NO.	CGN27U4A78	STRENGTH	7.0x10 <sup>6</sup> N/S

LOGGING DATA											
RUN NO.	DEPTHS		SPEED FT/MIN	T.C. SEC.	GAMMA RAY			NEUTRON			
	FROM	TO			SENS. SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	0	210	11	3	25	0L	5 CPS	3	4.2	2L	28 CPS



# ROKE

GAMMA RAY NEUTRON LOG

K. Feedings 7/13/51

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO. \_\_\_\_\_ COMPANY EDDING COAL LIMITED

WELL RH 196

LOCATION GREEN HILLS

FIELD EDDINE RIVER

PROVINCE BRITISH COLUMBIA

Permanent Datum GROUND LEVEL Elev. \_\_\_\_\_ H.B. \_\_\_\_\_

Log Measured from GROUND LEVEL Ft. Above Perm. Datum \_\_\_\_\_ D.F. \_\_\_\_\_

Well Depths Measured from \_\_\_\_\_ G.L. \_\_\_\_\_

Run No.	<u>ONE</u>
Date	<u>23 Dec 70</u>
First Reading	<u>202</u>
Last Reading	<u>0</u>
Footage Logged	<u>202</u>
Depth Reached	<u>203</u>
Depth Driller	<u>203</u>
Casing Role	
Casing Driller	
Fluid Type	<u>MUD</u>
Liquid Level	<u>4 FT</u>
Min. Diam.	
Operating Time	<u>2 HRS</u>
Truck No.	<u>10</u>
Recorded By	<u>LARKIN</u>
Witnessed By	<u>BERTRAND</u>

**312**

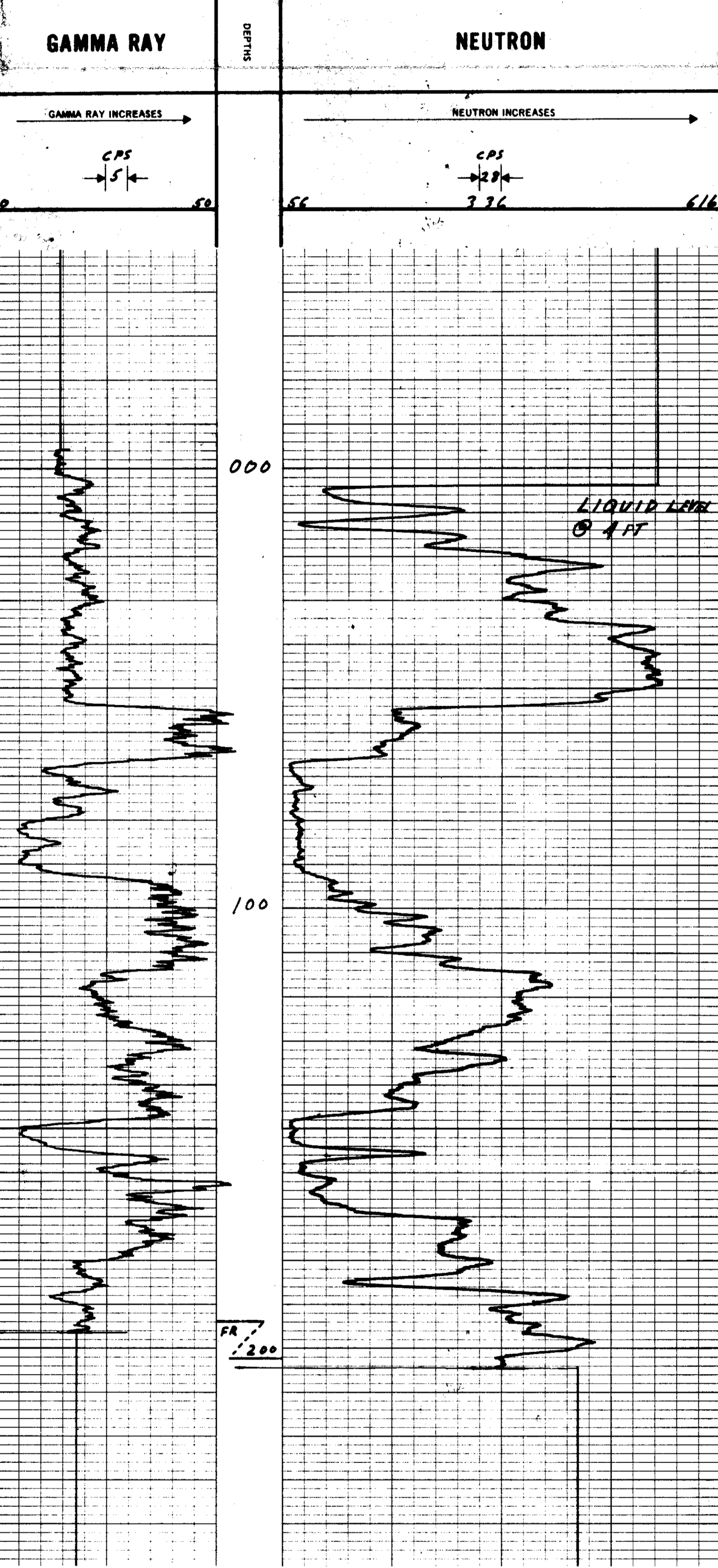
### EQUIPMENT DATA

GAMMA RAY				NEUTRON			
Run No.	<u>ONE</u>			Run No.	<u>ONE</u>		
Tool Model No.				Log Type	<u>NEUTRON/NEUTRON</u>		
Diameter	<u>1 1/2</u>			Tool Model No.			
Detector Model No.				Diameter	<u>1 1/2</u>		
Type	<u>GEIGER</u>			Detector Model No.			
Length	<u>18 INCH</u>			Type	<u>PROPORTIONAL</u>		
Distance to N. Source	<u>8.55 FT</u>			Length	<u>6 INCH</u>		
GENERAL				Source Model No.	<u>MRC-N-SS-W</u>		
Moist Truck No.	<u>10</u>			Serial No.	<u>606</u>		
Instrument Truck No.				Spacing	<u>19 INCH</u>		
Tool Serial No.	<u>CGN2704A78</u>			Type	<u>AmBe</u>		
				Strength	<u>7.00 x 10<sup>6</sup> N/S</u>		

### LOGGING DATA

Run No.	General		Gamma Ray				Neutron				
	From	To	Speed	T.C.	Sens.	Zero	API G R	T.C.	Sens.	Zero	API N.
			FT/Min	Sec	Settings	Div. L or R	Units Per Log Div.	Sec	Settings	Div. L or R	Units Per Log Div.
<u>1</u>	<u>0</u>	<u>202</u>	<u>11</u>	<u>3</u>	<u>25</u>	<u>01</u>	<u>5 cps</u>	<u>3</u>	<u>4.2</u>	<u>21</u>	<u>28 cps</u>

REMARKS



K-FROZENS 70(3)A-1

# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	COMPANY	FORDING COAL LIMITED
WELL	LOCATION	GREENHILLS
RH 197	FIELD	FORDING RIVER
TWP	PROVINCE	BRITISH COLUMBIA
RGE		
W		
M		
Permanent Datum	GROUND LEVEL	Elev.
Log Measured from	GROUND LEVEL	Fl. Above Perm. Datum
Well Depths Measured from		K.B. D.F. G.L.
Run No.	ONE	
Date	12 MAR 71	
First Reading	102	
Last Reading	0	
Footage Logged	102	
Depth Reached	103	
Depth Driller		
Casing Roke		
Casing Driller		
Fluid Type	WATER	
Liquid Level	FULL	
Min. Diam.	4 1/2	
Operating Time	2 HOURS	
Truck No.	30	
Recorded By	SUNDERLAND	Witnessed By
		TAPLIN

312

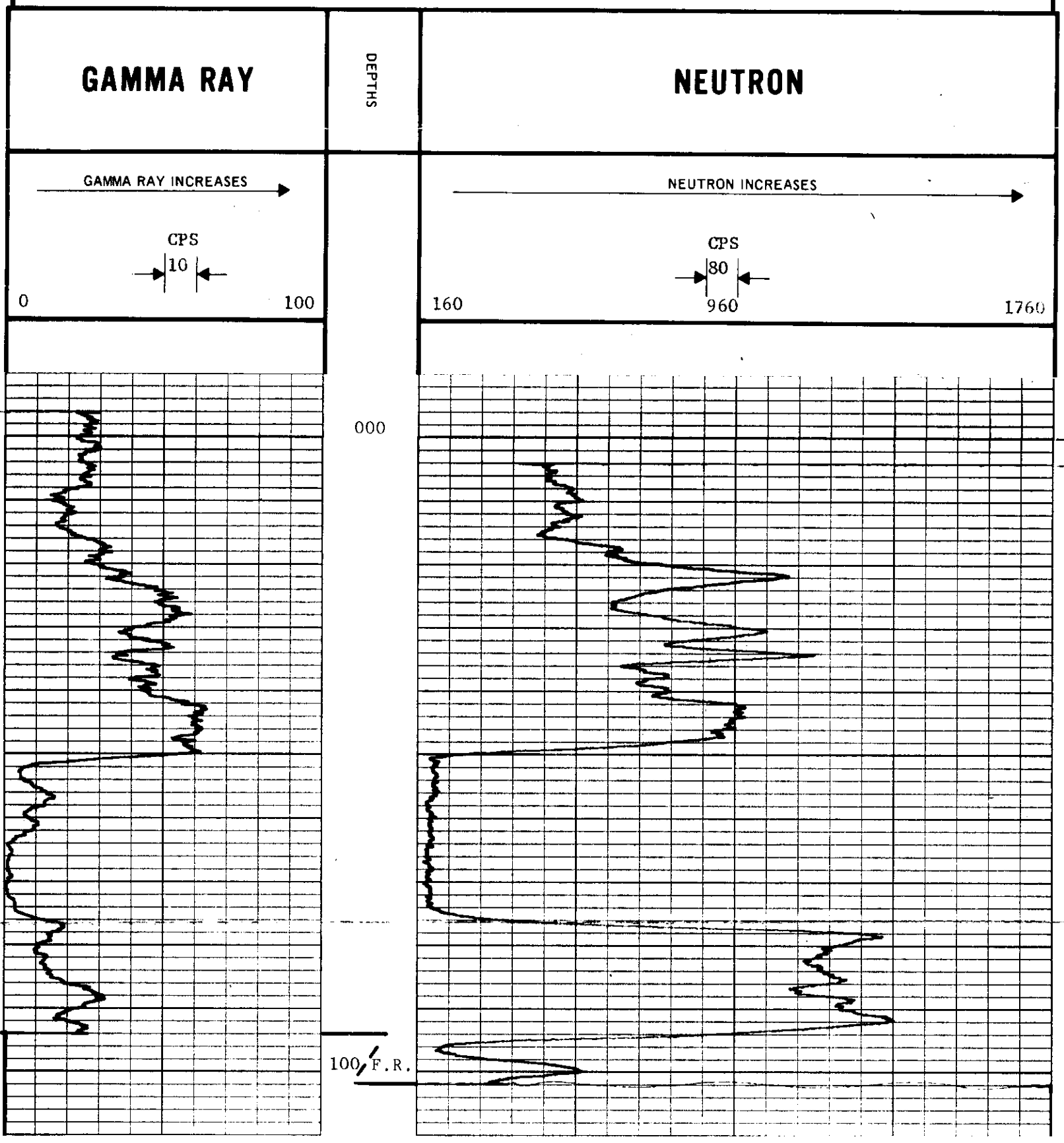
### EQUIPMENT DATA

GAMMA RAY				NEUTRON			
RUN NO.	ONE			RUN NO.	ONE		
TOOL MODEL NO.				LOG TYPE	NEUTRON/NEUTRON		
DIAMETER	1 1/8			TOOL MODEL NO.			
DETECTOR MODEL NO.				DIAMETER	1 1/8		
TYPE	GEIGER			DETECTOR MODEL NO.			
LENGTH	18 INCH			TYPE	PROPORTIONAL		
DISTANCE TO N. SOURCE	8.55 FT			LENGTH	6 INCH		
				SOURCE MODEL NO.	MRC-N-SS-W		
GENERAL				SERIAL NO.	606		
HOIST TRUCK NO.	30			SPACING	19 INCH		
INSTRUMENT TRUCK NO.				TYPE	AmBe		
TOOL SERIAL NO.	CGN27U4CB177			STRENGTH	7.00 x 10 <sup>6</sup> N/S		

### LOGGING DATA

GENERAL			GAMMA RAY				NEUTRON				
RUN NO.	DEPTHS		SPEED FT/MIN	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
	FROM	TO									
1	0	102	10	5	100	0L	10 CPS	3	1000	2L	80 CPS

REMARKS



# ROKE

GAMMA RAY NEUTRON LOG

R- FORDING 70/379-1

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	COMPANY	FORDING COAL LIMITED
LSD	WELL	RH 198
SEC	TWP	GREENHILLS
RGE	LOCATION	FORDING RIVER
W	FIELD	FORDING RIVER
M	PROVINCE	BRITISH COLUMBIA
Permanent Datum	GROUND LEVEL	Elev. _____
Log Measured from	GROUND LEVEL	Fl. Above Perm. Datum
Well Depths Measured from		K.B. _____ D.F. _____ C.L. _____
Run No.	ONE	
Date	22 DEC 70	
First Reading	199	
Last Reading	0	
Footage Logged	199	
Depth Reached	200	
Depth Driller	202	
Casing Roke		
Casing Driller		
Fluid Type	AIR/MUD	
Liquid Level	6	
Min. Diam.		
Operating Time	2 HOURS	
Truck No.	10	
Recorded By	LARKIN	Witnessed By
		TAPLIN

312

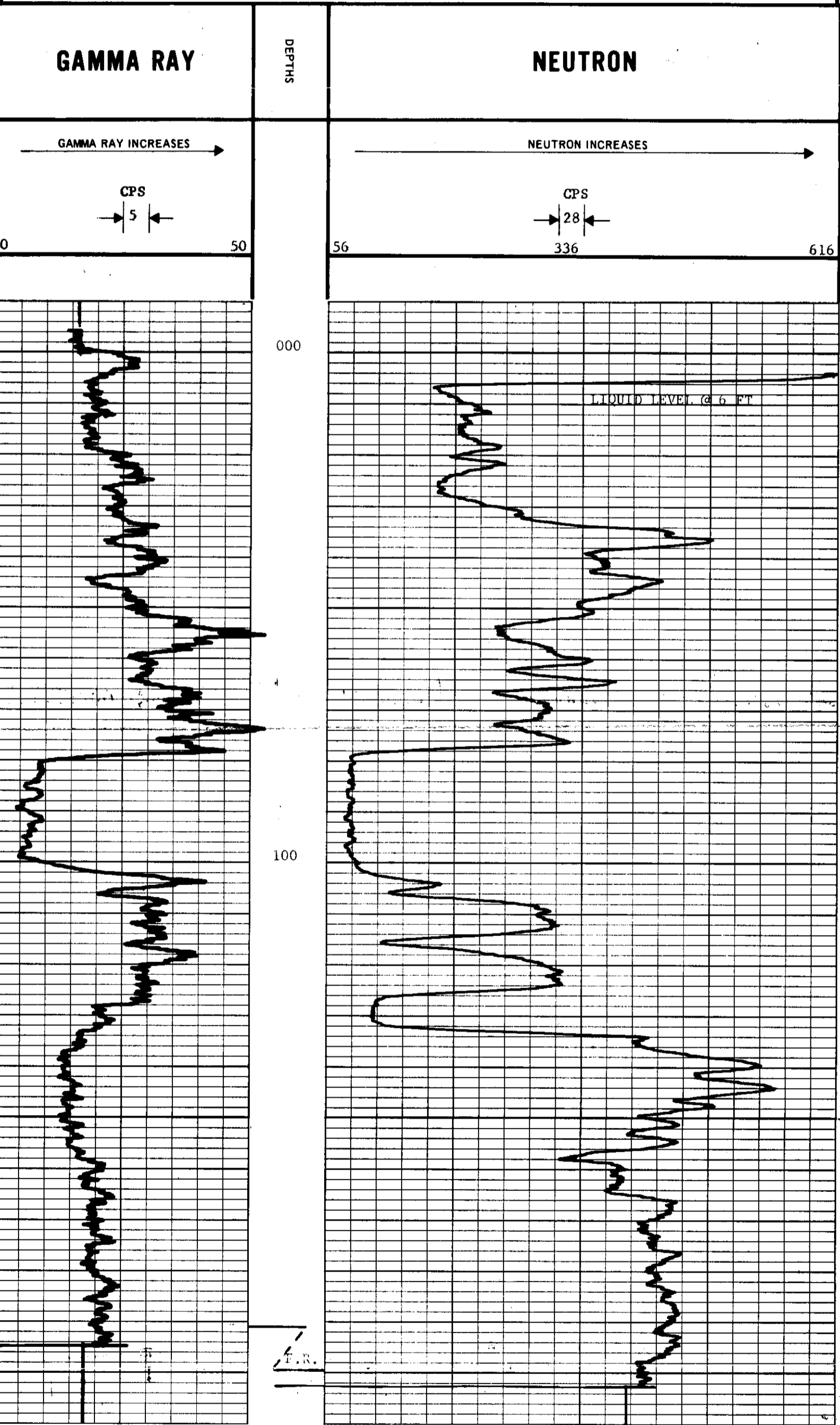
### EQUIPMENT DATA

GAMMA RAY				NEUTRON			
RUN NO.	ONE			RUN NO.	ONE		
TOOL MODEL NO.				LOG TYPE	NEUTRON/NEUTRON		
DIAMETER	1 1/2			TOOL MODEL NO.			
DETECTOR MODEL NO.				DIAMETER	1 1/2		
TYPE	GEIGER			DETECTOR MODEL NO.			
LENGTH	18 INCH			TYPE	PROPORTIONAL		
DISTANCE TO N. SOURCE	8.55 FT			LENGTH	6 INCH		
GENERAL				SOURCE MODEL NO.	MRC-N-SS-W		
HOIST TRUCK NO.	10			SERIAL NO.	606		
INSTRUMENT TRUCK NO.				SPACING	19 INCH		
TOOL SERIAL NO.	CGN27U4A78			TYPE	AmBe		
				STRENGTH	7.00 x 10 <sup>6</sup> N/S		

### LOGGING DATA

RUN NO.	DEPTHS		SPEED FT/MIN	T.C. SEC.	GAMMA RAY			NEUTRON			
	FROM	TO			SENS SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	0	199	11	3	25	0L	5 CPS	3	4.2	2L	28 CPS

REMARKS



R. FORDING 7013A

# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	COMPANY	FORDING COAL LIMITED
WELL	WELL	RH 199
LOCATION	LOCATION	GREENHILLS
FIELD	FIELD	FORDING RIVER
PROVINCE	PROVINCE	BRITISH COLUMBIA
Permanent Datum	GROUND LEVEL	Elev. _____
Log Measured from	GROUND LEVEL	Ft. Above Perm. Datum _____
Well Depths Measured from		K.B. _____ D.F. _____ G.L. _____
Run No.	ONE	
Date	21 DEC 70	
First Reading	190	
Last Reading	0	
Footage Logged	190	
Depth Reached	191	
Depth Driller	203	
Casing Roke		
Casing Driller		
Fluid Type	AIR/MUD	
Liquid Level	28	
Min. Diam.		
Operating Time	2 HOURS	
Truck No.	10	
Recorded By	LARKIN	Witnessed By
		TAPLIN

312

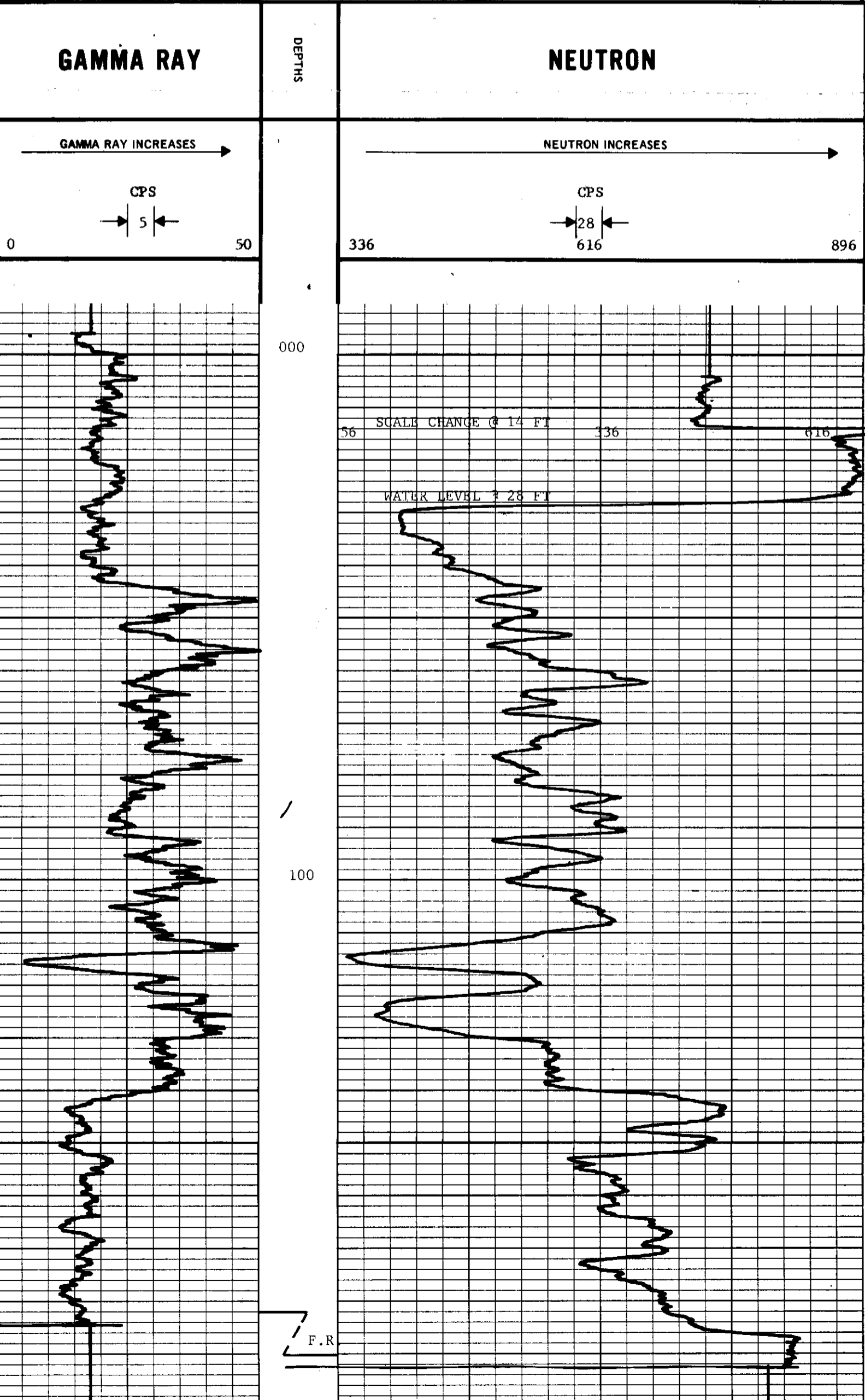
### EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/2	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	1 1/2
TYPE	GEIGER	DETECTOR MODEL NO.	
LENGTH	18 INCH	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	8.55 FT	LENGTH	6 INCH
		SOURCE MODEL NO.	MRC-N-SS-W
		SERIAL NO.	606
GENERAL		SPACING	19 INCH
HOIST TRUCK NO.	10	TYPE	AmBe
INSTRUMENT TRUCK NO.		STRENGTH	7.00 x 10 <sup>6</sup> N/S
TOOL SERIAL NO.	CGN27U4A78		

### LOGGING DATA

RUN NO.	GENERAL		GAMMA RAY				NEUTRON				
	FROM	TO	SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	0	14	11	3	25	0L	5 CPS	3	4.2	12L	28 CPS
	14	190	11	3	25	0L	5 CPS	3	4.2	2L	28 CPS

REMARKS



F.R.

Turnbull Mountain

RH 200 to RH 208

MUANA : 208

OIL ENTERPRISES LTD. CALGARY, ALBERTA

COMPANY **FORBION CORP CO LTD**

WELL **RH 200**

LOCATION **TURNBULL MOUNTAIN**

FIELD **EARLIE RIVER**

PROVINCE **BRITISH COLUMBIA**

PERMANENT DATUM **GRAND LEVEL** Elev: \_\_\_\_\_ K.B. \_\_\_\_\_

LOG MEASURED FROM **GROUND LEVEL** Ft. Above Perm. Datum \_\_\_\_\_ D.F. \_\_\_\_\_

DATE **ONE**

FOOTAGE LOGGED **396**

DEPTH REACHED **397**

DEPTH DRIVER **410**

CASTING RATE \_\_\_\_\_

CASTING DRIVER \_\_\_\_\_

FLUID TYPE **WATER**

LIQUID LEVEL **13 FT.**

MIN. DIAM. \_\_\_\_\_

OPERATING TIME **4 HRS.**

TRUCK NO. **10**

RECORDED BY **ROCKS**

K-FACTORS 20(3)

A NEUTRON LOG

**312**

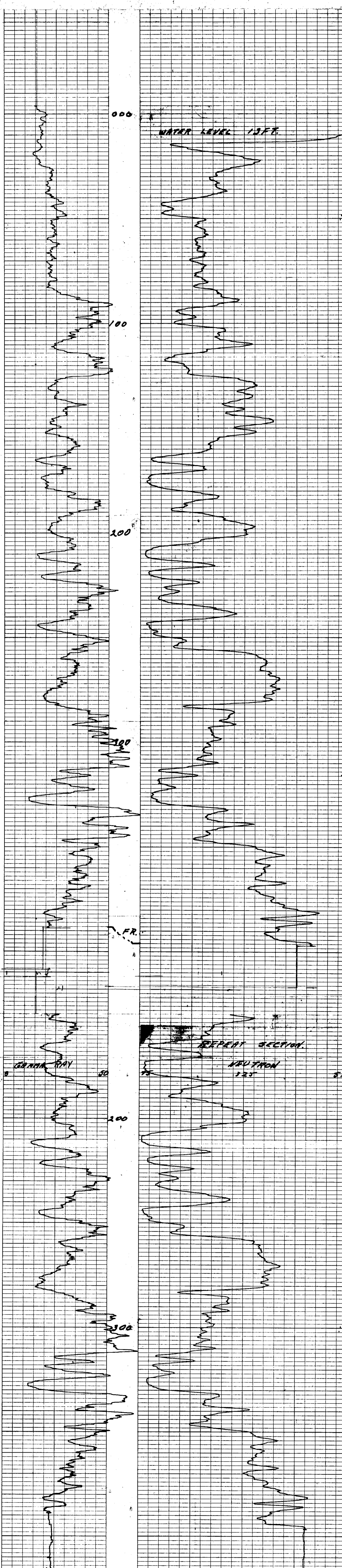
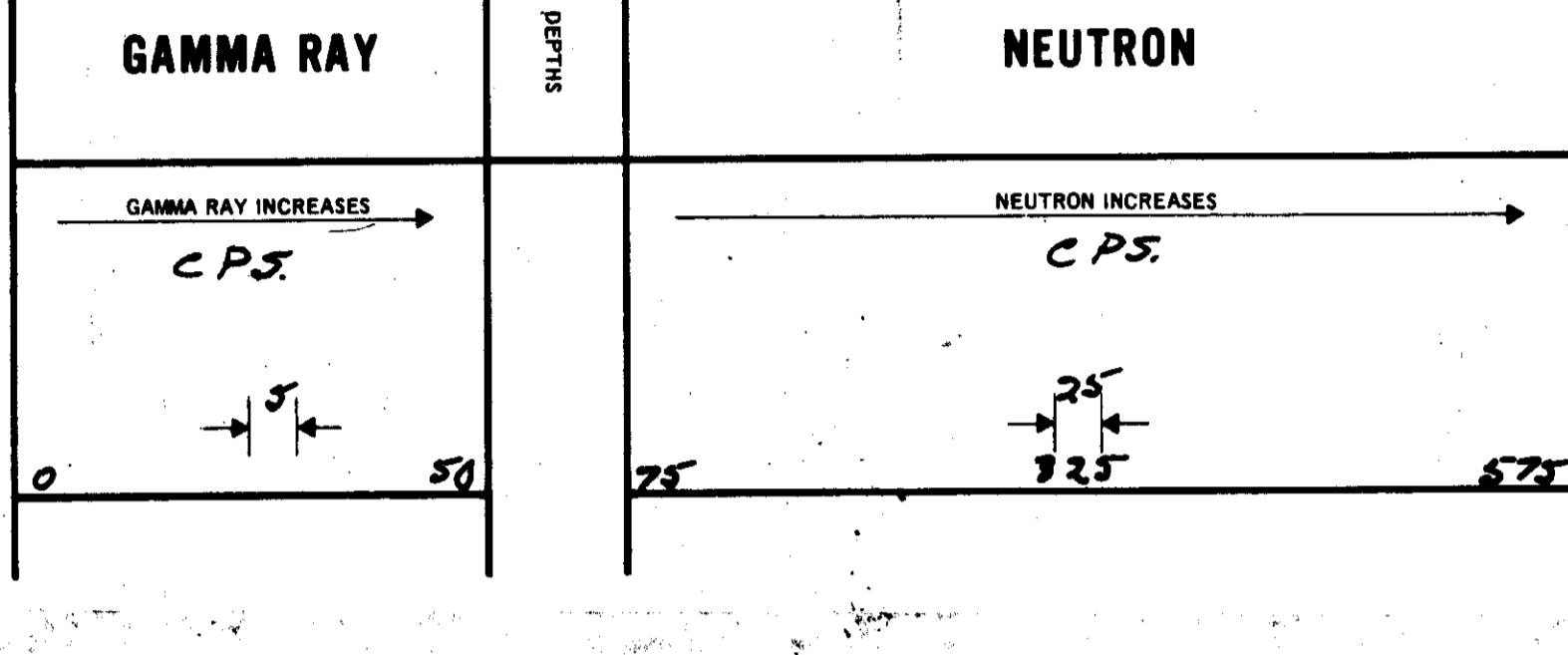
EQUIPMENT DATA

GAMMA RAY				NEUTRON			
RUN NO.	<b>ONE</b>			RUN NO.	<b>ONE</b>		
TOOL MODEL NO.	<b>1 1/2</b>			LOG TYPE	<b>NEUTRON/NEUTRON</b>		
DIAMETER	<b>1 1/2</b>			TOOL MODEL NO.	<b>1 1/2</b>		
DETECTOR MODEL NO.	<b>GEIGER</b>			DIAMETER	<b>1 1/2</b>		
TYPE	<b>18 INCH</b>			DETECTOR MODEL NO.	<b>PROPORTIONAL</b>		
LENGTH	<b>8.55 FT</b>			LENGTH	<b>6 INCH</b>		
DISTANCE TO N. SOURCE				SOURCE MODEL NO.	<b>MRC-N-SS-W</b>		
GENERAL				SERIAL NO.	<b>598</b>		
HOIST TRUCK NO.	<b>10</b>			SPACING	<b>19 INCHES</b>		
INSTRUMENT TRUCK NO.				TYPE	<b>AmBe</b>		
TOOL SERIAL NO.	<b>CEN 2709R 65</b>			STRENGTH	<b>6.94 x 10<sup>6</sup> N/S</b>		

LOGGING DATA

GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	DEPTHS		SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
	FROM	TO									
1	200	396	13	4	25	0	5 CPS	4	5	3L	25 CPS
2	200	396	<b>REPEAT SECTION - SCALE AS ABOVE.</b>								

REMARKS



# ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

K-FOURING 70(5)A-1

FILE NO. \_\_\_\_\_

COMPANY **FORDING CAROL CO.**

WELL **RH 201**

LOCATION **TURNBULL MOUNTAIN.**

RGE \_\_\_\_\_

FIELD **FORDING RIVER.**

PROVINCE **BRITISH COLUMBIA.**

Permanent Datum \_\_\_\_\_ Elev. \_\_\_\_\_

Log Measured from **CROWD LEVEL.** Ft. Above Perm. Datum \_\_\_\_\_

Well Depth Measured from **CROWD LEVEL.** G.L. \_\_\_\_\_

Run No. \_\_\_\_\_ Date **01E 12 MAR 72**

First Reading **418**

Last Reading **000**

Footage Logged **418**

Depth Reached **420**

Depth Driller **421**

Casing Role **121 FT**

Casing Driller \_\_\_\_\_

Fluid Type **WATER**

Liquid Level **0.3 FT.**

Min. Diam. \_\_\_\_\_

Operating Time **2 HRS.**

Truck No. **10**

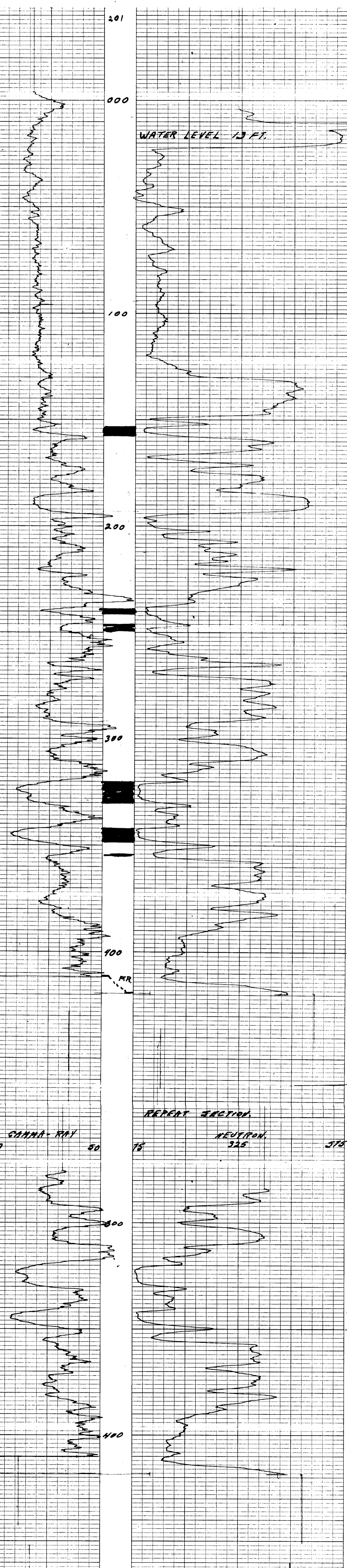
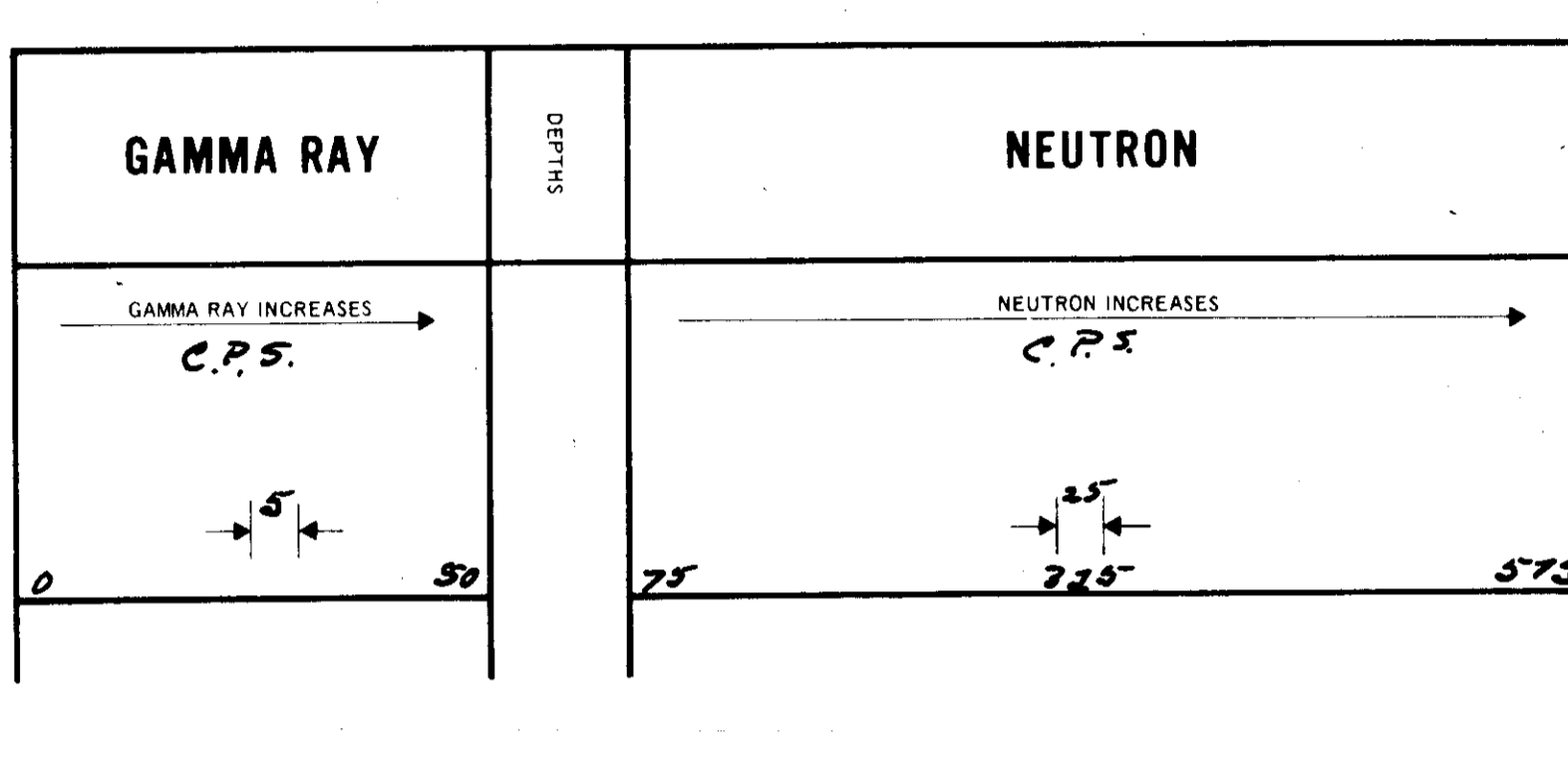
Recorded By **PETERSON** Witnessed By **BURBENCHUK.**

EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	<b>ONE</b>	RUN NO.	<b>ONE</b>
TOOL MODEL NO.		LOG TYPE	<b>NEUTRON/NEUTRON</b>
DIAMETER	<b>1 1/8</b>	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	<b>1 1/8</b>
TYPE	<b>GEIGER</b>	DETECTOR MODEL NO.	
LENGTH	<b>18 INCH</b>	TYPE	<b>PROPORTIONAL</b>
DISTANCE TO N. SOURCE	<b>8.55 FT</b>	LENGTH	<b>6 INCH</b>
		SOURCE MODEL NO.	<b>MRC-N-SS-W</b>
		SERIAL NO.	<b>598</b>
HOIST TRUCK NO.	<b>10</b>	SPACING	<b>19 INCHES</b>
INSTRUMENT TRUCK NO.		TYPE	<b>AmBe</b>
TOOL SERIAL NO.	<b>CGN2709A65</b>	STRENGTH	<b>6.94 x 10<sup>6</sup> N/S</b>

LOGGING DATA											
GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	DEPTHS FROM	TO	SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API GR. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
<b>1</b>	<b>000</b>	<b>419</b>	<b>13</b>	<b>4</b>	<b>25</b>	<b>0</b>	<b>5 CPS.</b>	<b>4</b>	<b>5</b>	<b>3L</b>	<b>25 CPS.</b>
<b>2</b>	<b>300</b>	<b>419</b>	<b>13</b>	<b>4</b>	<b>25</b>	<b>0</b>	<b>5 CPS.</b>	<b>4</b>	<b>5</b>	<b>3L</b>	<b>25 CPS.</b>

REMARKS \_\_\_\_\_



K-FACTS MARKED 70536-1

# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO. COMPANY BARONING COAL CO. LTD.

WELL RH. 203.

LOCATION TUNABULL MTR

FIELD FORBING RIVER

PROVINCE BC

Permanent Datum GROUND LEVEL. Elev. \_\_\_\_\_

Log Measured from GROUND LEVEL. Ft. Above Perm. Datum \_\_\_\_\_

Well Depths Measured from GROUND LEVEL. G.L. \_\_\_\_\_

Run No. 045

Date 22.07.10.

First Reading 446

Last Reading 480

Footage Logged 446

Depth Reached 447

Depth Driller 460

Casing Driller WATER

Fluid Type 0 FT.

Liquid Level \_\_\_\_\_

Min. Diam. \_\_\_\_\_

Casing Size \_\_\_\_\_

Operating Time 2 HRS.

Truck No. 10

Recorded By PETERSON Witnessed By PETERSON

**312**

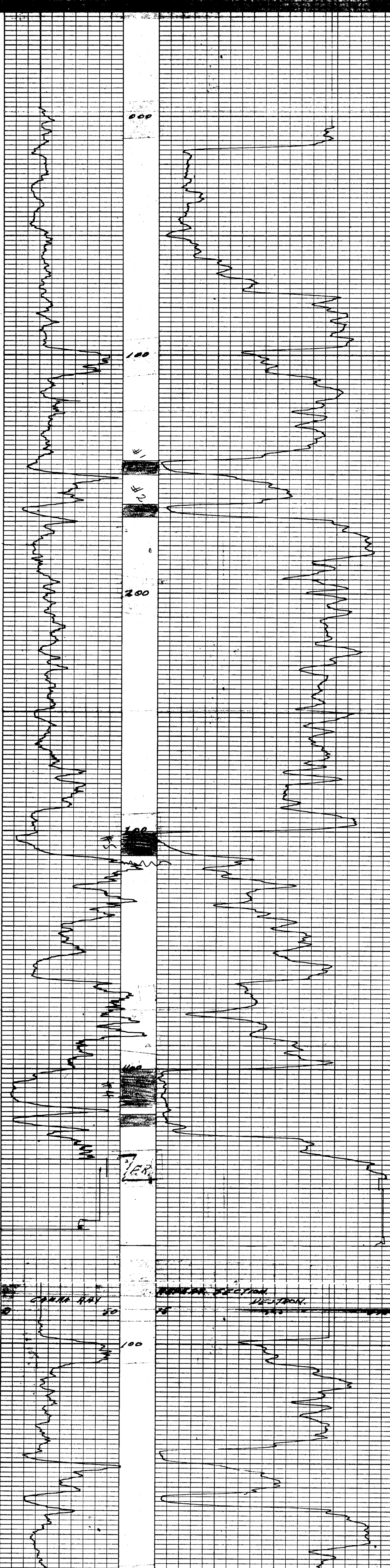
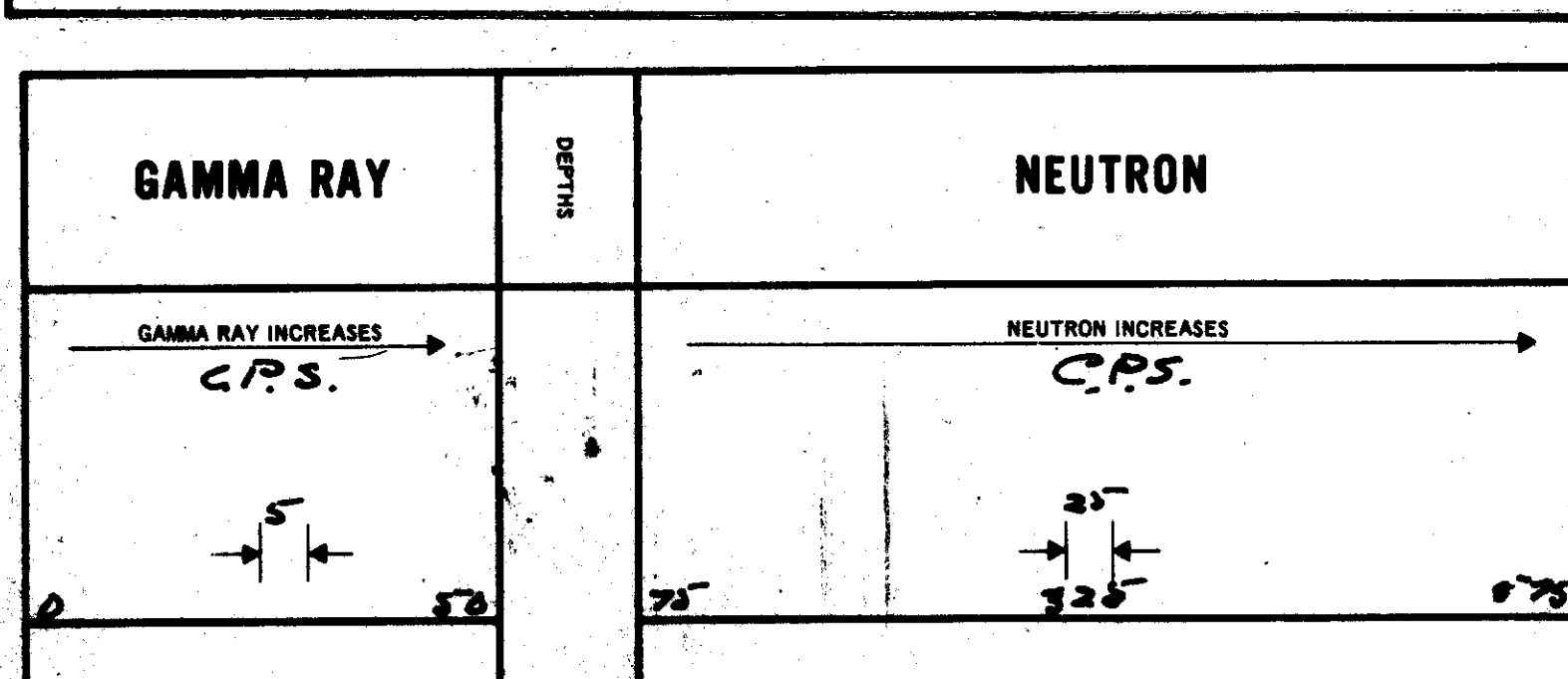
### EQUIPMENT DATA

GAMMA RAY				NEUTRON			
RUN NO.	<u>045</u>			RUN NO.	<u>045</u>		
TOOL MODEL NO.	<u>1H</u>			LOG TYPE	<u>NEUTRON/NEUTRON</u>		
DIAMETER	<u>1H</u>			TOOL MODEL NO.	<u>1H</u>		
DETECTOR MODEL NO.	<u>GEIGER</u>			DETECTOR MODEL NO.	<u>PROPORTIONAL</u>		
LENGTH	<u>18 INCH</u>			LENGTH	<u>6 INCH</u>		
DISTANCE TO N. SOURCE	<u>8.55 FT</u>			SOURCE MODEL NO.	<u>MRC-N-SS-W</u>		
GENERAL				SERIAL NO.	<u>598</u>		
HOIST TRUCK NO.	<u>10</u>			SPACING	<u>19 INCH.</u>		
INSTRUMENT TRUCK NO.	<u>GENATIMATE</u>			TYPE	<u>AmBe</u>		
TOOL SERIAL NO.	<u>GENATIMATE</u>			STRENGTH	<u>6.94 x 10<sup>6</sup> N/S</u>		

### LOGGING DATA

RUN NO.	GENERAL DEPTHS		SPEED FT/MIN	T.C. SEC.	GAMMA RAY				NEUTRON			
	FROM	TO			SENS. SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.	
1	000	446	13	4	25	0	5	4	5	32	25	CPS
	100	200	<u>(REPORT SECTION - SCALED AS ABOVE.)</u>									

REMARKS





# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

K-FOSSONS 7013/A-1

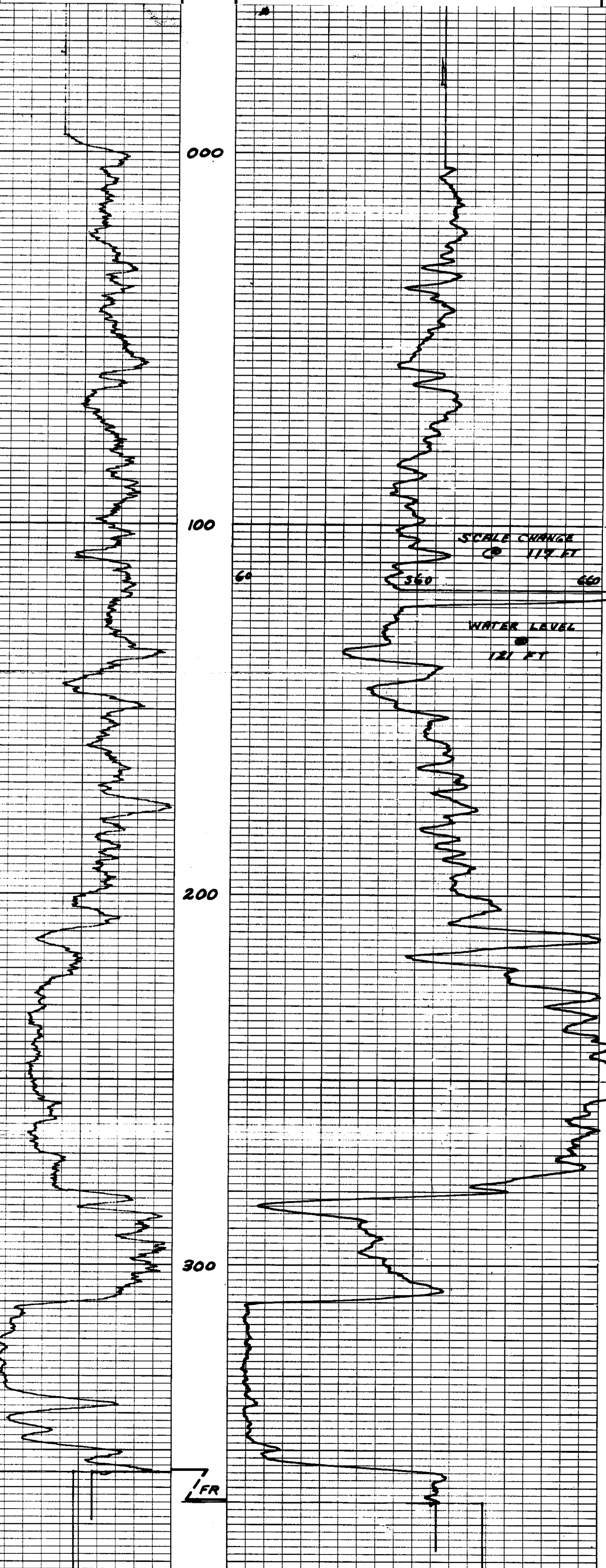
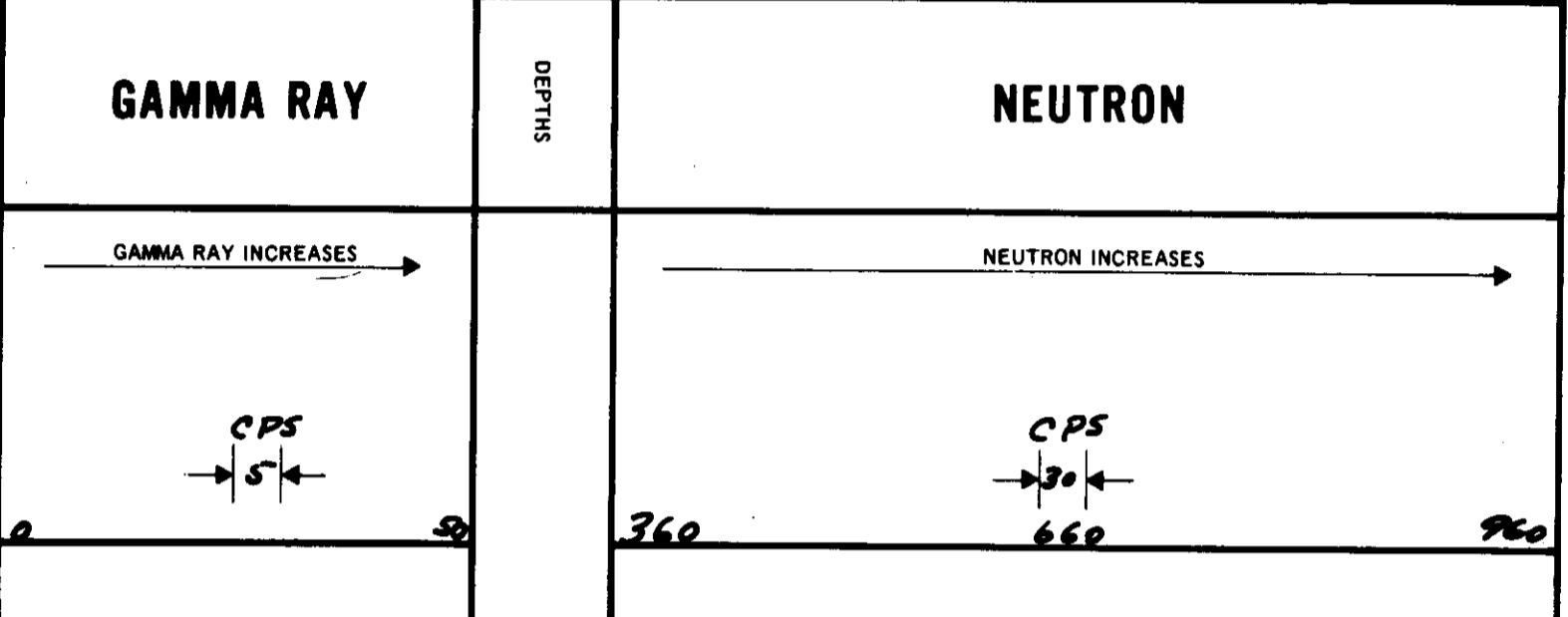
FILE NO.	COMPANY	WELL	LOCATION	FIELD	PROVINCE
	FORDING COAL LIMITED	RH 204	TURNBULL	FORDING RIVER	BRITISH COLUMBIA
LSD					
SEC					
TWP					
RGE					
W					
M					
Permanent Datum	GROUND LEVEL	Elev.		K.B.	
Log Measured from	GROUND LEVEL	Fl. Above Perm. Datum		D.F.	
Well Depths Measured from				G.L.	
Run No.	ONE	Date	10 JULY 70		
First Reading	363				
Last Reading	0				
Footage Logged	363				
Depth Reached	364				
Depth Driller					
Casing Role					
Casing Driller					
Fluid Type	AIR/WATER				
Liquid Level	121				
Mfn. Diam.					
Operating Time	2 HRS				
Truck No.	20				
Recorded By	PETERSON	Witnessed By	M. FARLAND		

312

EQUIPMENT DATA					
GAMMA RAY			NEUTRON		
RUN NO.	ONE			RUN NO.	ONE
TOOL MODEL NO.				LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/2			TOOL MODEL NO.	
DETECTOR MODEL NO.				DIAMETER	1 1/2
TYPE	GEIGER			DETECTOR MODEL NO.	
LENGTH	18 INCH			TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	8.55 FT			LENGTH	6 INCH
				SOURCE MODEL NO.	MRC-N-SS-W
				SERIAL NO.	598
GENERAL				SPACING	19 INCH
HOIST TRUCK NO.	20			TYPE	AmBe
INSTRUMENT TRUCK NO.				STRENGTH	6.94 x 10 <sup>6</sup> N/S
TOOL SERIAL NO.	CGN 27 U4A 65				

LOGGING DATA											
GENERAL			GAMMA RAY				NEUTRON				
RUN NO.	DEPTHS		SPEED	T.C.	SENS.	ZERO	API G.R. UNITS	T.C.	SENS.	ZERO	API N. UNITS
	FROM	TO	FT/MIN	SEC.	SETTINGS	DIV. L OR R	PER LOG DIV.	SEC.	SETTINGS	DIV. L OR R	PER LOG DIV.
1	0	117	11	3	25	0L	5 CPS	3	4	12L	30 CPS
	117	363	11	3	25	0L	5 CPS	3	4	2	30 CPS



K-FOURTHS-7013/A-1

# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO. COMPANY **FORDING COAL CO. LTD.**

WELL **PH 205**

LOCATION **TWIN BULL MTN.**

FIELD **FORDING RIVER.**

PROVINCE **B.C.**

Permanent Datum Log Measurement: **SEALED LEVEL.** Elev. \_\_\_\_\_ K.B. \_\_\_\_\_  
 Well Depth Measured from: **GROUND LEVEL.** R. Above Perm. Datum D.F. \_\_\_\_\_  
 O.L. \_\_\_\_\_

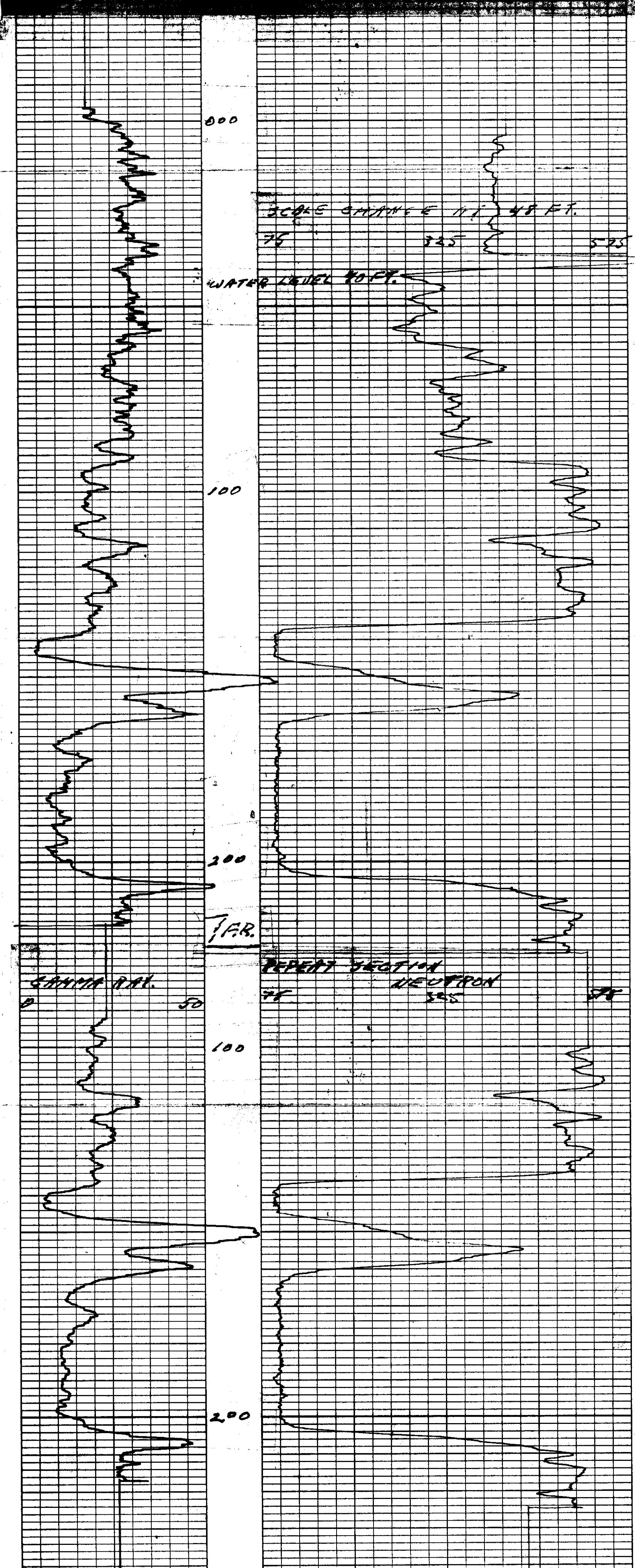
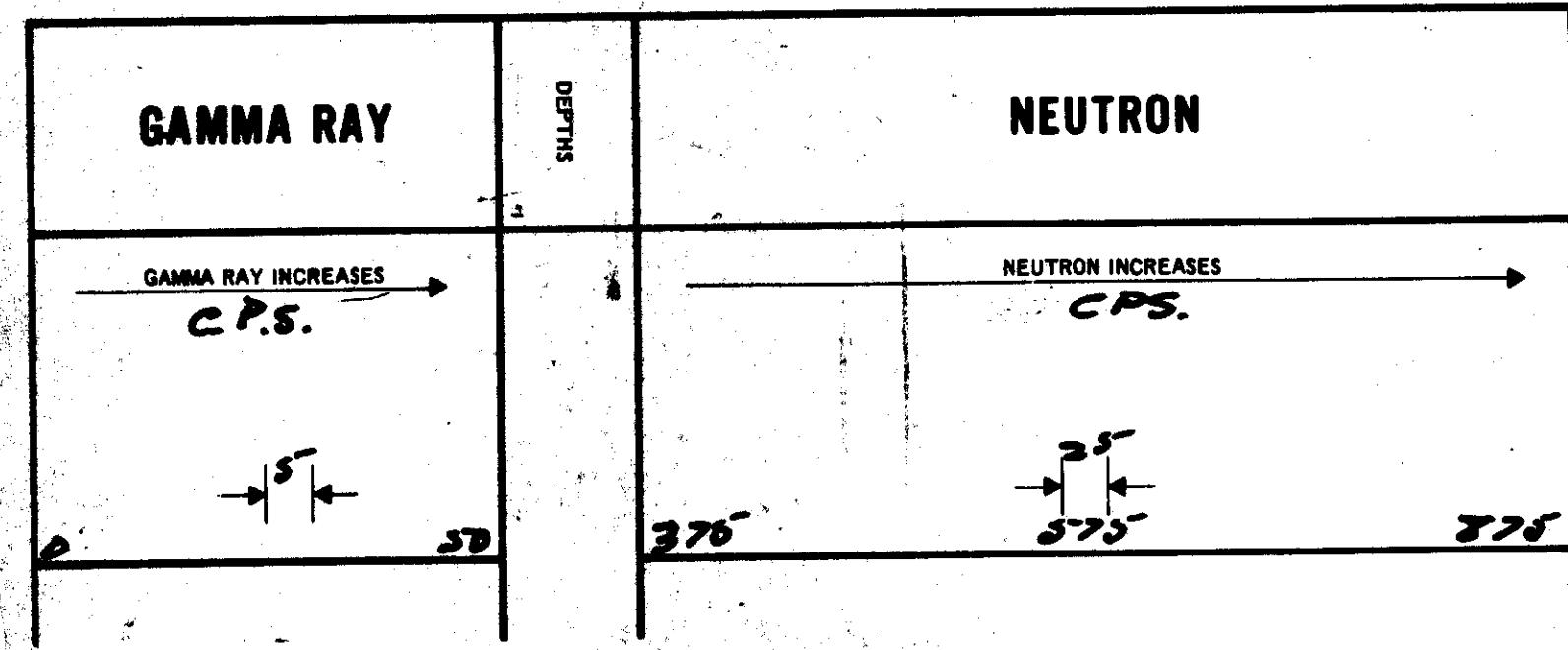
Run No.	<b>016</b>
Date	<b>2/20/10</b>
First Reading	<b>283</b>
Last Reading	<b>000</b>
Footage Logged	<b>223</b>
Depth Reached	<b>223</b>
Depth Driller	<b>223</b>
Casing, Poles	
Casing Driller	
Fluid Type	<b>WATER</b>
Liquid Level	<b>WATER</b>
Mm. Diam.	
Operating Time	<b>2 HRS.</b>
Truck No.	<b>10</b>

Recorded By **PETERSON**  
 Witnessed By **PEARSON**

EQUIPMENT DATA						
GAMMA RAY			NEUTRON			
Run No.	<b>016</b>			Run No.	<b>016</b>	
Tool Model No.				Log Type	<b>NEUTRON/NEUTRON</b>	
Diameter	<b>1 1/2</b>			Tool Model No.		
Detector Model No.				Diameter	<b>1 1/2</b>	
Type	<b>GEIGER</b>			Detector Model No.		
Length	<b>18 INCH</b>			Type	<b>PROPORTIONAL</b>	
Distance to N. Source	<b>8.55 FT</b>			Length	<b>6 INCH</b>	
GENERAL			Serial No.	<b>598</b>		
Moist Truck No.	<b>10</b>			Spacing	<b>18 INCH.</b>	
Instrument Truck No.				Type	<b>AmBe</b>	
Tool Serial No.	<b>2827415</b>			Strength	<b>6.94 x 10<sup>6</sup> N/S</b>	

LOGGING DATA											
Run No.	DEPTHS		SPEED FT/MIN	T.C. SEC.	SENS. SETTINGS	GAMMA RAY		NEUTRON		ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
	FROM	TO				ZERO	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS		
1	000	036	13	4	25	0	5 CPS	4	5	15L	25 CPS
	036	223	13	4	25	0	6 CPS	4	6	3L	25 CPS
	100	223	<b>(REPEAT SECTION - SCALED AS ABOVE)</b>								



K-FAKINGS 70(3)A-1

# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

COMPANY **FORDING COAL LIMITED**

WELL **RH 206**

LOCATION **TURNBULL**

FIELD **FORDING RIVER**

PROVINCE **BRITISH COLUMBIA**

Permanent Datum **GROUND LEVEL** Elev. \_\_\_\_\_ K.B. \_\_\_\_\_

Log Measured from **GROUND LEVEL** Ft. Above Perm. Datum \_\_\_\_\_ D.F. \_\_\_\_\_

Well Depths Measured from \_\_\_\_\_ G.L. \_\_\_\_\_

LSD \_\_\_\_\_

SEC \_\_\_\_\_

TWP \_\_\_\_\_

RGE \_\_\_\_\_

W \_\_\_\_\_

M \_\_\_\_\_

Run No. **ONE**

Date **10 JULY 70**

First Reading **276**

Last Reading **0**

Footage Logged **276**

Depth Reached **277**

Depth Driller \_\_\_\_\_

Casing Role \_\_\_\_\_

Casing Driller \_\_\_\_\_

Fluid Type **AIR/WATER**

Liquid Level **119**

Min. Diam. \_\_\_\_\_

Operating Time **2 HRS**

Truck No. **20**

Recorded By **PETERSON**

Witnessed By **MC FARLAND**

**312**

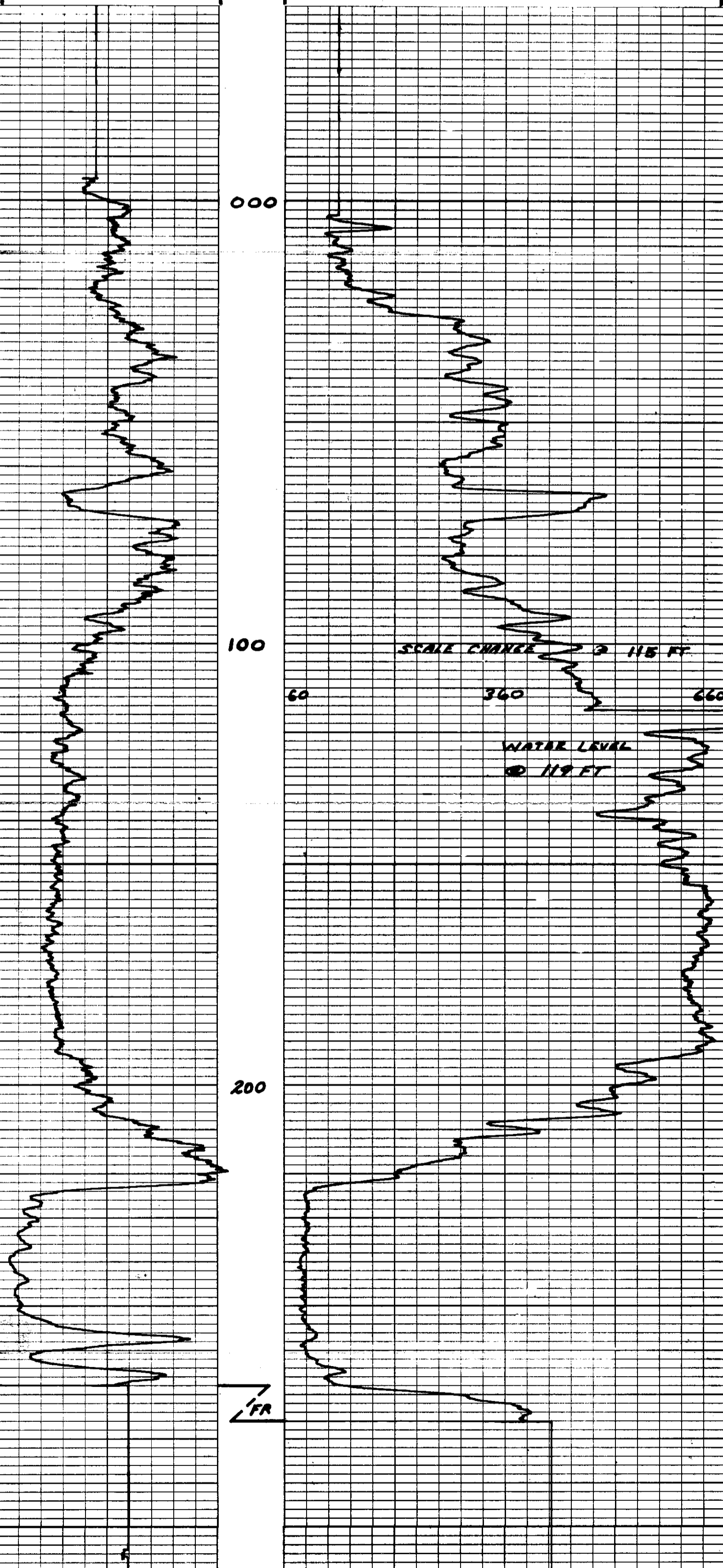
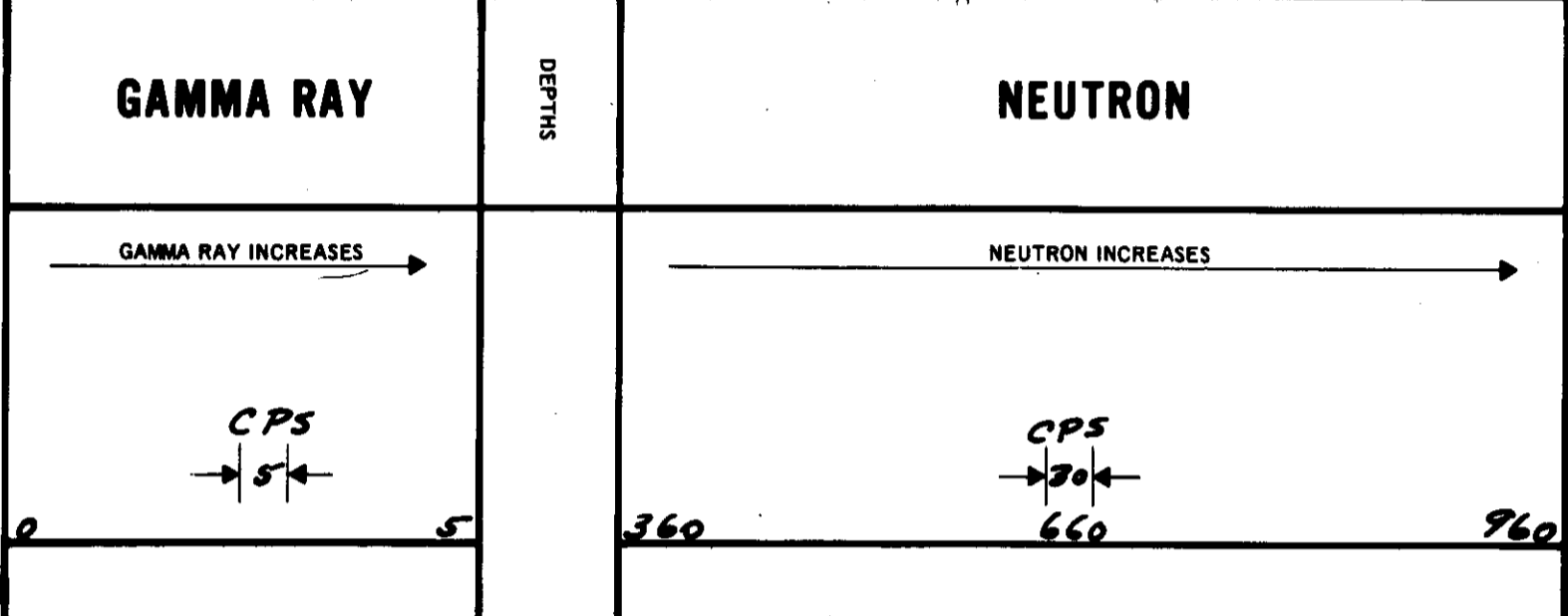
### EQUIPMENT DATA

GAMMA RAY				NEUTRON			
RUN NO.	<b>ONE</b>			RUN NO.	<b>ONE</b>		
TOOL MODEL NO.				LOG TYPE	<b>NEUTRON/NEUTRON</b>		
DIAMETER	<b>1 1/2</b>			TOOL MODEL NO.			
DETECTOR MODEL NO.				DIAMETER	<b>1 1/2</b>		
TYPE	<b>GEIGER</b>			DETECTOR MODEL NO.			
LENGTH	<b>18 INCH</b>			TYPE	<b>PROPORTIONAL</b>		
DISTANCE TO N. SOURCE	<b>8.55 FT</b>			LENGTH	<b>6 INCH</b>		
GENERAL				SOURCE MODEL NO.	<b>MRC-N-SS-W</b>		
HOIST TRUCK NO.	<b>20</b>			SERIAL NO.	<b>598</b>		
INSTRUMENT TRUCK NO.				SPACING	<b>19 INCH</b>		
TOOL SERIAL NO.	<b>CGN 2749A 65</b>			TYPE	<b>AmBe</b>		
				STRENGTH	<b>6.94 x 10<sup>6</sup> N/S</b>		

### LOGGING DATA

RUN NO.	GENERAL DEPTHS		SPEED FT/MIN	T.C. SEC.	GAMMA RAY			T.C. SEC.	SENS. SETTINGS	NEUTRON		
	FROM	TO			SENS. SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.			ZERO DIV. L OR R	API N. UNITS PER LOG DIV.	
1	0	115	11	3	25	0	5 CPS	3	4	12L	30 CPS	
	115	276	11	3	25	0	5 CPS	3	4	2L	30 CPS	

REMARKS



K-FOGONS 20/5/A-1

# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO. COMPANY **FOODING COAL LIMITED**

WELL **RH 207**

LOCATION **TURNBULL**

FIELD **EARLING RIVER**

PROVINCE **BRITISH COLUMBIA**

Permanent Datum **GROUND LEVEL** Elev. \_\_\_\_\_ K.B. \_\_\_\_\_  
 Log Measured from **GROUND LEVEL** Ft. Above Perm. Datum D.F. \_\_\_\_\_  
 Well Depths Measured from \_\_\_\_\_ G.L. \_\_\_\_\_

Run No. **ONE**

Date **10 JULY 70**

First Reading **230**

Last Reading **0**

Footage Logged **230**

Depth Reached **231**

Depth Driller \_\_\_\_\_

Casing Role \_\_\_\_\_

Casing Driller \_\_\_\_\_

Fluid Type **AIR/WATER**

Liquid Level **40**

Min. Diam. \_\_\_\_\_

Operating Time **2 HRS**

Truck No. **20**

Recorded By **PETERSON** Witnessed By **MC ENRLAND**

# 312

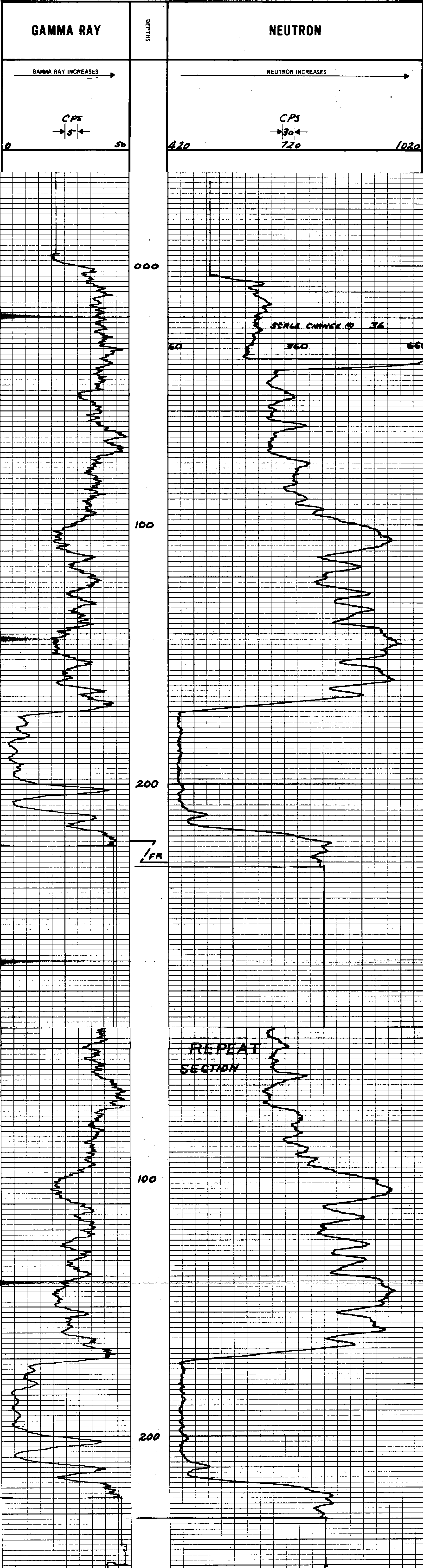
### EQUIPMENT DATA

GAMMA RAY				NEUTRON			
RUN NO.	<b>ONE</b>			RUN NO.	<b>ONE</b>		
TOOL MODEL NO.				LOG TYPE	<b>NEUTRON/NEUTRON</b>		
DIAMETER	<b>1 1/8</b>			TOOL MODEL NO.			
DETECTOR MODEL NO.				DIAMETER	<b>1 1/8</b>		
TYPE	<b>GEIGER</b>			DETECTOR MODEL NO.			
LENGTH	<b>18 INCH</b>			TYPE	<b>PROPORTIONAL</b>		
DISTANCE TO N. SOURCE	<b>8.55 FT</b>			LENGTH	<b>6 INCH</b>		
GENERAL				SOURCE MODEL NO.	<b>MRC-N-SS-W</b>		
HOIST TRUCK NO.	<b>20</b>			SERIAL NO.	<b>598</b>		
INSTRUMENT TRUCK NO.				SPACING	<b>19 INCH</b>		
TOOL SERIAL NO.	<b>CGN 27 U4A 65</b>			TYPE	<b>AmBe</b>		
				STRENGTH	<b>6.94 x 10<sup>6</sup> N/S</b>		

### LOGGING DATA

RUN NO.	GENERAL DEPTHS		SPEED FT/MIN	GAMMA RAY				NEUTRON			
	FROM	TO		T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	0	36	11	3	25	0L	5CPS	3	4	14L	30CPS
	36	230	"	3	25	0L	5CPS	3	4	2L	30CPS

REMARKS



K-FOGGENS 70(3)A-1

# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO. COMPANY FORDING CORP. LIMITED

WELL RH 208

LOCATION TURNBULL MOUNTAIN

FIELD FORDING RIVER

PROVINCE BRITISH COLUMBIA

Permanent Datum GROUND LEVEL Elev. \_\_\_\_\_ K.B. \_\_\_\_\_  
 Log Measured from GROUND LEVEL Ft. Above Perm. Datum D.F. \_\_\_\_\_  
 Well Depths Measured from \_\_\_\_\_ G.L. \_\_\_\_\_

Run No. ONE

Date 12 JULY 70

First Reading 293

Last Reading 000

Footage Logged 293

Depth Reached 294

Depth Driller \_\_\_\_\_

Casing Role \_\_\_\_\_

Casing Driller \_\_\_\_\_

Fluid Type WATER

Liquid Level 15 FT.

Mfn. Diam. \_\_\_\_\_

Operating Time 2 HRS.

Truck No. 20

Recorded By PETERSON

312

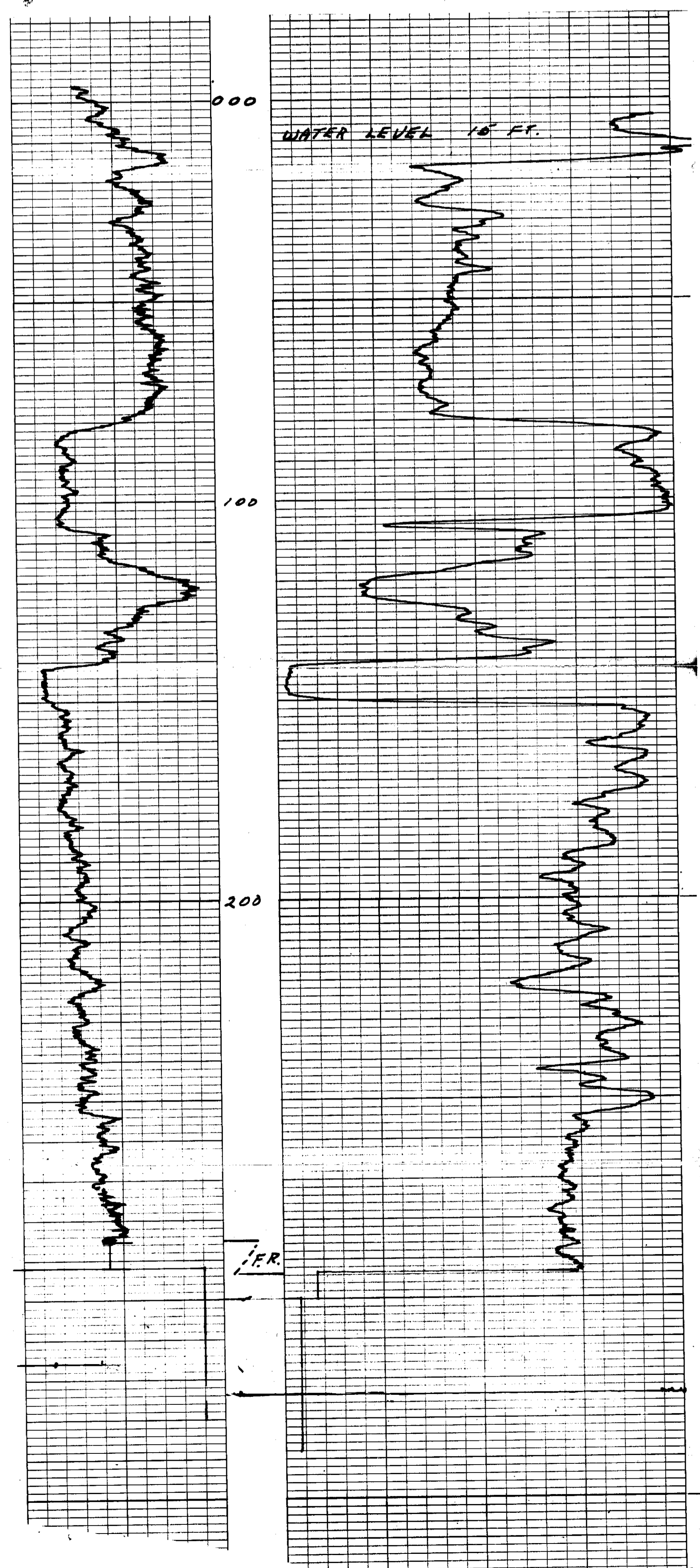
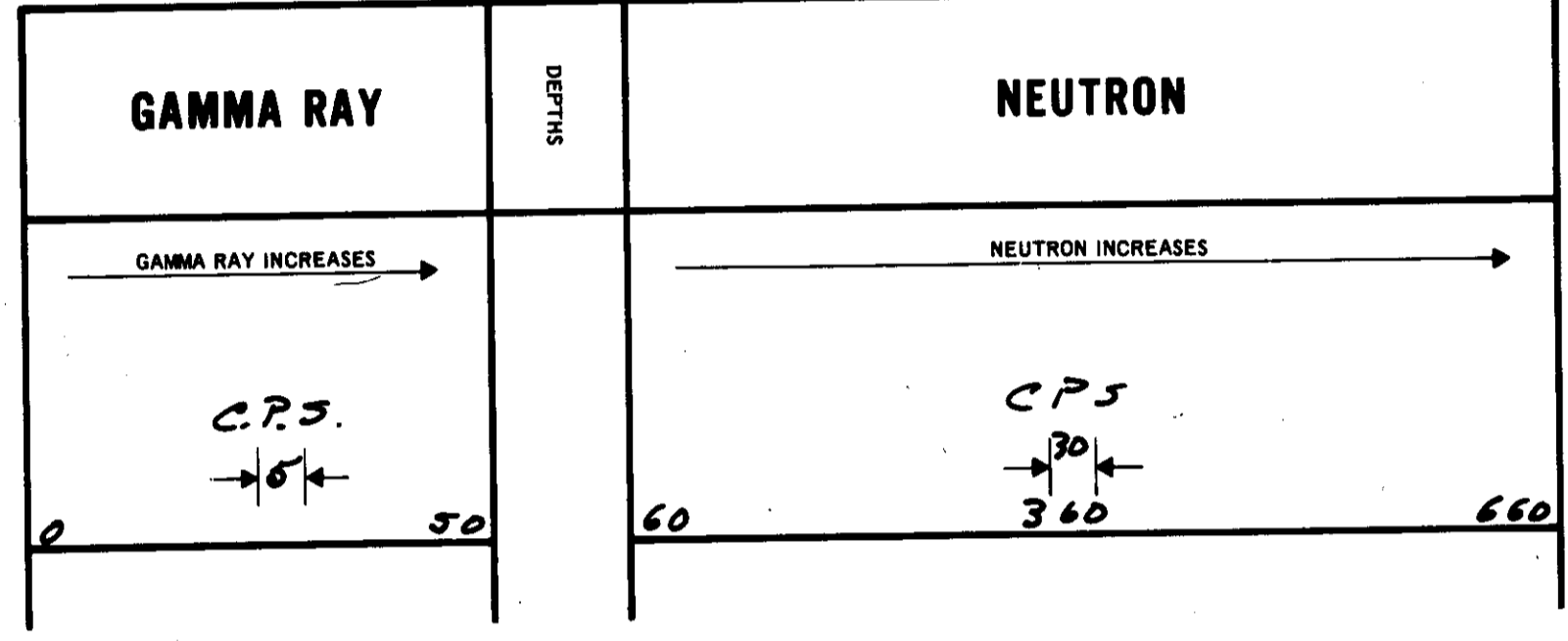
### EQUIPMENT DATA

GAMMA RAY				NEUTRON			
RUN NO.	<u>ONE</u>			RUN NO.	<u>ONE</u>		
TOOL MODEL NO.				LOG TYPE	<u>NEUTRON/NEUTRON</u>		
DIAMETER	<u>1 1/2</u>			TOOL MODEL NO.			
DETECTOR MODEL NO.				DIAMETER	<u>1 1/2</u>		
TYPE	<u>GEIGER</u>			DETECTOR MODEL NO.			
LENGTH	<u>18 INCH</u>			TYPE	<u>PROPORTIONAL</u>		
DISTANCE TO N. SOURCE	<u>8.55 FT</u>			LENGTH	<u>6 INCH</u>		
GENERAL				SOURCE MODEL NO.	<u>MRC-N-SS-W</u>		
HOIST TRUCK NO.	<u>20</u>			SERIAL NO.	<u>598</u>		
INSTRUMENT TRUCK NO.				SPACING	<u>18 INCH.</u>		
TOOL SERIAL NO.	<u>66270465</u>			TYPE	<u>AmBe</u>		
				STRENGTH	<u>6.94 x 10<sup>6</sup> N/S</u>		

### LOGGING DATA

RUN NO.	DEPTHS		SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	GAMMA RAY		NEUTRON		API N. UNITS PER LOG DIV.	
	FROM	TO				ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS		ZERO DIV. L OR R
<u>1</u>	<u>200</u>	<u>293</u>	<u>11</u>	<u>4</u>	<u>25</u>	<u>0</u>	<u>3003</u>	<u>3</u>	<u>4</u>	<u>26</u>	<u>300PS</u>

REMARKS



Eagle Mountain

84 300 to 84 311

AMMA RAY NEUTRON LOG

Well No. 84 300 to 84 311

Company: FORDING COAL LIMITED

Location: EAGLE MOUNTAIN

Field: FORDING RIVER

Well: DPH 300

Log No. 01E

Date: 18 JUNE 70

Time: 10:58

Depth Reached: 958

Fluid Type: WATER

Min. Diam.: 3 3/4

Operating Time: 4 HRS

Truck No.: 20

Witnessed By: TAPLIN

Recorded By: BANKS

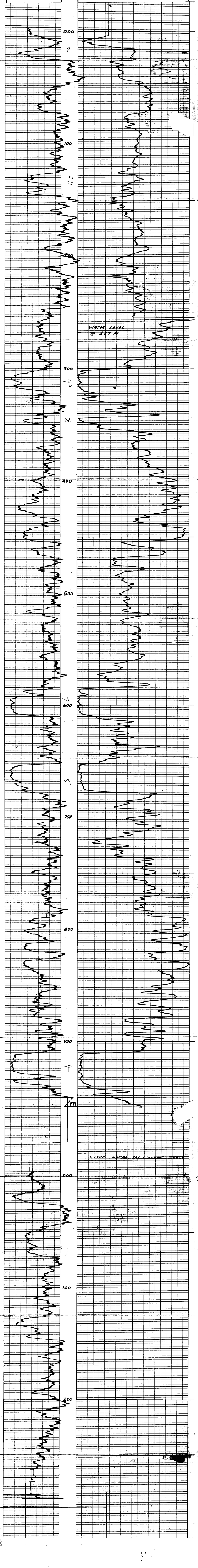
312

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		TOOL MODEL NO.	NEUTRON/NEUTRON
DIAMETER	1 1/2	DIAMETER	1 1/2
DETECTOR MODEL NO.		DETECTOR MODEL NO.	
TYPE	GEIGER	TYPE	PROPORTIONAL
LENGTH	18 INCH	LENGTH	6 INCH
DISTANCE TO N. SOURCE	8.55 FT	SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	598
HOIST TRUCK NO.	20	SPACING	19 INCH
INSTRUMENT TRUCK NO.		TYPE	AmBe
TOOL SERIAL NO.	CON 2744A 65	STRENGTH	6.94 x 10 <sup>6</sup> N/S

GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	FROM	TO	SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	0	254	14	3	25	0L	5 CPS	3	5	16L	25 CPS
	254	958	14	3	25	0L	5 CPS	3	5	4L	25 CPS

REMARKS



K - PROZONE 2051a Marked

# ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

FILE NO. \_\_\_\_\_

COMPANY FORDING COAL LIMITED

WELL D01 300

LOCATION EAGLE MOUNTAIN

RANGE FOREBIC RIVER

W. M. PROVINCE BRITISH COLUMBIA

Permanent Datum (GROUND) LEVEL. Elev. \_\_\_\_\_ K.B. \_\_\_\_\_

Log Measured from \_\_\_\_\_ GROUND LEVEL. Ft. Above Perm. Datum \_\_\_\_\_ D.F. \_\_\_\_\_

Well Depth Measured from \_\_\_\_\_ G.L. \_\_\_\_\_

Run No. \_\_\_\_\_

Date 18 JUNE 70

First Reading 9:58

Last Reading 0

Footage Logged 9:58

Depth Reached 9:58

Depth Driller 9:58

Casing Driller

Fluid Type WATER

Liquid Level 2:57

M.H. Diam. 3 3/4

Operating Time 4 HOURS

Truck No. 20

Recorded By PANKS Witnessed By TAPLIN

**3/12**

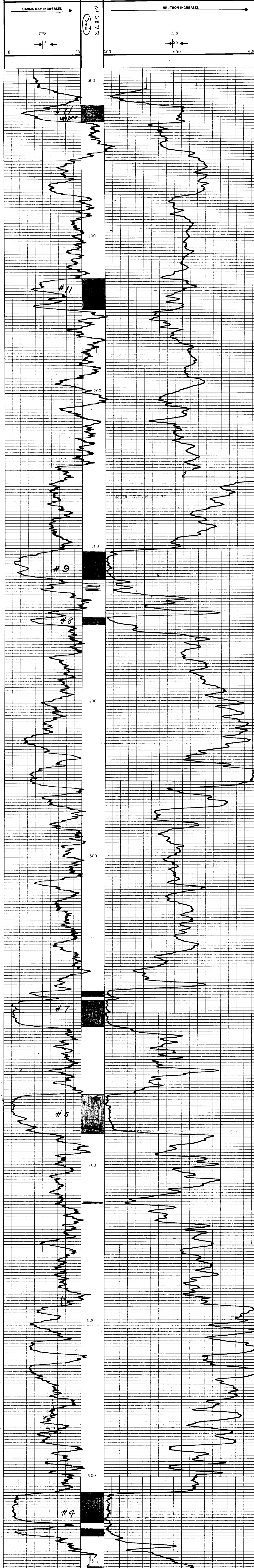
EQUIPMENT DATA

GAMMA RAY				NEUTRON			
RUN NO.	ONE			RUN NO.	ONE		
TOOL MODEL NO.				LOG TYPE	NEUTRON/NEUTRON		
DIAMETER	1 1/2			TOOL MODEL NO.	1 1/2		
DETECTOR MODEL NO.				DETECTOR MODEL NO.			
TYPE	GEIGER			TYPE	PROPORTIONAL		
LENGTH	18 INCH			LENGTH	6 INCH		
DISTANCE TO N. SOURCE	8.55 FT			SOURCE MODEL NO.	MRC-N-SS-W		
GENERAL				GENERAL			
HOIST TRUCK NO.	20,			SPACING	19 INCH		
INSTRUMENT TRUCK NO.				TYPE	AmBe		
TOOL SERIAL NO.	CGN2/U4A65			STRENGTH	6.94 x 10 <sup>6</sup> N/S		

LOGGING DATA

RUN NO.	GENERAL			GAMMA RAY				NEUTRON			
	DEPTHS FROM	TO	SPEED FT/MIN	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	0	254	14	3	25	OL	5 cps	3	5	16L	25 cps
	254	958	14	3	25	OL	5 cps	3	5	4L	25 cps

REMARKS



K. FOSTER 7637A-1

# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	COMPANY	WELL	LOCATION	FIELD	PROVINCE
LOG NO.	FORBES COAL LIMITED	22H 301 (SERUN)	EGGIE MOUNTAIN	FOODING RIVER	BRITISH COLUMBIA
LOG TYPE					
LOG MEASURED FROM					
LOG DEPTHS MEASURED FROM					
DATE					
RUN NO.					
LAST READING					
FORAGE LOGGED					
DEPTH DRIER					
CASING HOLES					
FLUID TYPE					
LIQUID LEVEL					
MIN. DIAM.					
OPERATING TIME					
TRUCK NO.					
RECORDED BY	BANKS				
WITNESSED BY	D. S. FARLAND				

312

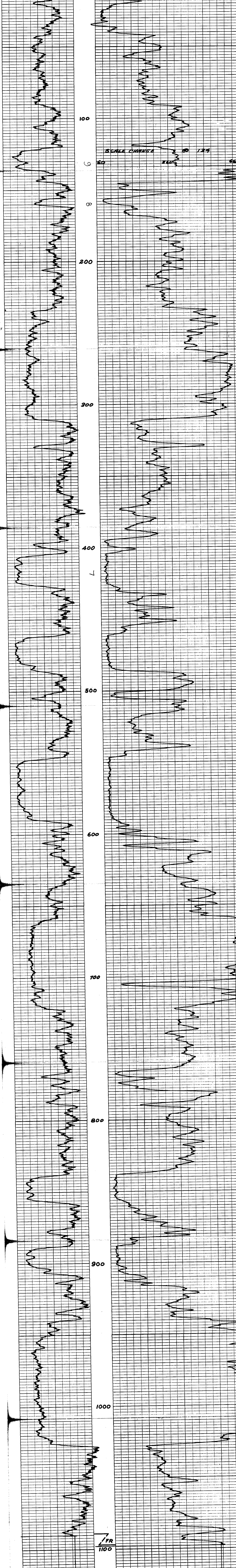
### EQUIPMENT DATA

GAMMA RAY				NEUTRON			
RUN NO.	ONE			RUN NO.	ONE		
TOOL MODEL NO.	1 1/2			LOG TYPE	NEUTRON/NEUTRON		
DIAMETER	1 1/2			TOOL MODEL NO.	1 1/2		
DETECTOR MODEL NO.	GEIGER			DIAMETER	1 1/2		
TYPE	18 INCH			DETECTOR MODEL NO.	PROPORTIONAL		
LENGTH	8.55 FT			LENGTH	6 INCH		
DISTANCE TO N. SOURCE	GENERAL			SOURCE MODEL NO.	MRC-N-SS-W		
				SERIAL NO.	598		
MOIST TRUCK NO.	20			SPACING	19 INCH		
INSTRUMENT TRUCK NO.				TYPE	AmBe		
TOOL SERIAL NO.	CEN 274465			STRENGTH	6.94 x 10 <sup>6</sup> N/S		

### LOGGING DATA

RUN NO.	GAMMA RAY				NEUTRON						
	DEPTHS FROM	DEPTHS TO	SPEED FT/MIN	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
2	0	134	11	3	25	06	5 CPS	3	4	26	30 CPS
	134	1097	11	3	25	06	5 CPS	3	4	126	30 CPS

REMARKS: DUE TO VERY HARD SAND NEAR BOTTOM THE LOG WAS RUN ON DIFFERENT SCALE TO AVOID AWKWARD SCALE CHANGES THE HOLE WAS RELOGGED WITH NEW SCALE. NOTE DISCREPANCY IN WATER LEVEL BETWEEN RUN 1 AND RUN 2.





# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

K- Forecast 7/2/70

FILE NO.	COMPANY	PROVINCE	WELL	LOCATION	FIELD
15D	FORDING COAL LIMITED	ALBERTA	BH 301 (GREEN)	BLACK HORSE	FORDING RIVER
SEC			TWP		
RGE			RGE		
W			W		
M			M		
Permanent Datum: GROUND LEVEL	PROVINCE: ALBERTA	Elev.:	K.B.		
Log Measured from: SURFACE LEVEL	Log Measured from: SURFACE LEVEL	Fe. Above Perm. Datum	D.F.		
Well Depth Measured from:	Well Depth Measured from:		G.L.		
Run No.	Date	Run No.	Date		
ONE	18 JUNE 70	TWO	11 JULY 70		
First Reading	653	1097			
Last Reading	0	0			
Source Logged	653	1097			
Depth Driller	665	1098			
Casing Role					
Casing Driller					
Fluid Type	WATER	AIR/WATER			
Fluid Level	84	144			
Min. Diam.	3 3/4	3 3/4			
Operating Time		4 HOURS			
Truck No.		20			
Recorded By	BARNS	Witnessed By	MCALPAIN		

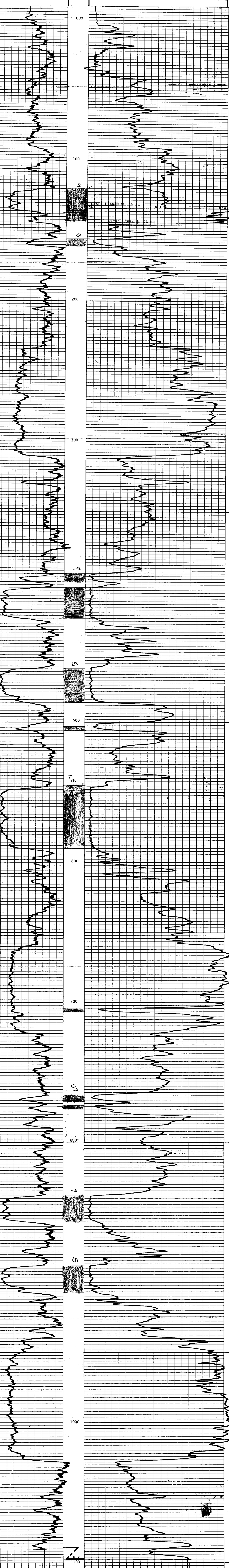
312

GAMMA RAY		NEUTRON	
RUN NO.	TWO	RUN NO.	TWO
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/2	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	1 1/2
TYPE	GEIGER	DETECTOR MODEL NO.	
LENGTH	18 INCH	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	8.55 FT	LENGTH	6 INCH
		SOURCE MODEL NO.	MRC-N-SS-W
		SERIAL NO.	598
MOIST TRUCK NO.	20	SPACING	19 INCH
INSTRUMENT TRUCK NO.		TYPE	AmBe
TOOL SERIAL NO.	CGN2704665	STRENGTH	6.94 x 10 <sup>6</sup> N/S

GENERAL		GAMMA RAY				NEUTRON			
DEPTH		T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
2		3	25	OL	5 cps	3	4	2L	30 cps
		3	25	OL	5 cps	3	4	2L	30 cps

REMARKS: DUE TO VERY HARD SAND NEAR BOTTOM THE LOG WAS RUN ON DIFFERENT SCALE. TO AVOID AWARD SCALE CHANGES THE HOLE WAS RELOGGED WITH NEW SCALE. NOTE DIFFERENCE IN WATER LEVEL BETWEEN RUN 1 AND RUN 2.



K-LOGGING 70(3)A-1

# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO. \_\_\_\_\_  
 COMPANY **FORBES COAL LIMITED**  
 SEC \_\_\_\_\_  
 TWP \_\_\_\_\_  
 RGE \_\_\_\_\_  
 W \_\_\_\_\_  
 M \_\_\_\_\_

WELL **DDY 302**  
 LOCATION **EAGLE MOUNTAIN**  
 FIELD **FOODING RIVER**

PROVINCE **BRITISH COLUMBIA**  
 PERMIT DATA **GROUND LEVEL** Elev. \_\_\_\_\_  
 Log Measured from **Ric Floor** Ft. Above Perm. Datum D.F. \_\_\_\_\_  
 Well Depths Measured from **Ric Floor** G.L. \_\_\_\_\_

Run No. **ONE** TWD \_\_\_\_\_  
 Date **22 JULY 70** / **10 JULY 70**  
 First Reading **845** / **833**  
 Last Reading **0** / **833**  
 Footage Logged **845** / **240**  
 Depth Reached **845** / **1085**

Depth Driller \_\_\_\_\_  
 Casing Note \_\_\_\_\_  
 Casing Diameter **8 7/8**  
 Fluid Type **WATER**  
 Liquid Level \_\_\_\_\_  
 Min. Diam. **5 3/4**

Operating Time **6 HRS** / **3 HRS**  
 Truck No. **20** / **20**

Recorded By **Banks** Witnessed By **M. J. FARLAND**

**312**

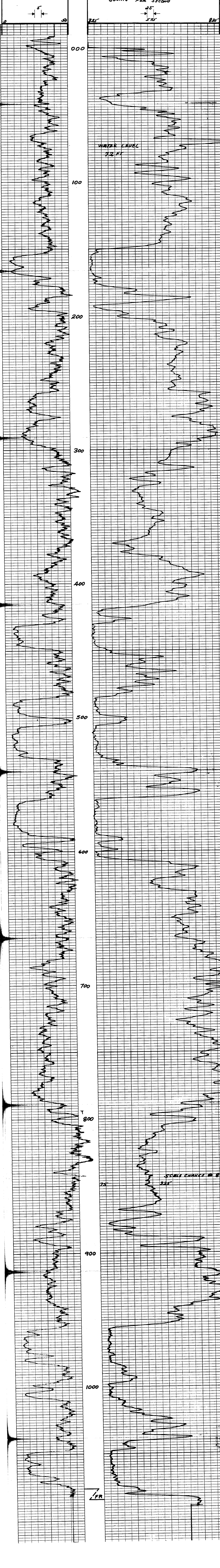
EQUIPMENT DATA

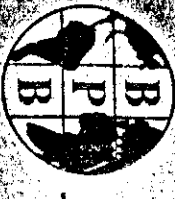
GAMMA RAY				NEUTRON			
TWO MODEL NO.	<b>DNE</b>			RUN NO.	<b>ONE</b>		
DIAMETER	<b>1 1/2</b>			LOG TYPE	<b>NEUTRON/NEUTRON</b>		
DETECTOR MODEL NO.	<b>GEIGER</b>			TOOL MODEL NO.	<b>1 1/2</b>		
TYPE	<b>18 INCH</b>			DIAMETER	<b>PROPORTIONAL</b>		
LENGTH	<b>8.55 FT</b>			LENGTH	<b>6 INCH</b>		
DISTANCE TO N. SOURCE				SOURCE MODEL NO.	<b>MRC-N-SS-W</b>		
GENERAL				SERIAL NO.	<b>598</b>		
HOIST TRUCK NO.	<b>20</b>			SPACING	<b>19 INCH</b>		
INSTRUMENT TRUCK NO.				TYPE	<b>AmBe</b>		
TOOL SERIAL NO.	<b>C6N 27UAA 68</b>			STRENGTH	<b>6.94 x 10<sup>6</sup> N/S</b>		

LOGGING DATA

RUN NO.	GENERAL DEPTHS		SPEED FT/MIN	T.C. SEC.	SENS. SETTINGS	GAMMA RAY			NEUTRON		
	FROM	TO				ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	0	68	12	3	25	OL	5 CPS	3	5	136	25 CPS
	68	844	12	3	25	OL	5 CPS	3	5	44	25 CPS
2	833	1084	12	3	25	OL	5 CPS	3	5	34	25 CPS

REMARKS





BPB INDUSTRIES LTD

K-FORDING 70631A-1

GAMMA & H.R. DENSITY LOG

303 BOREHOLE

312

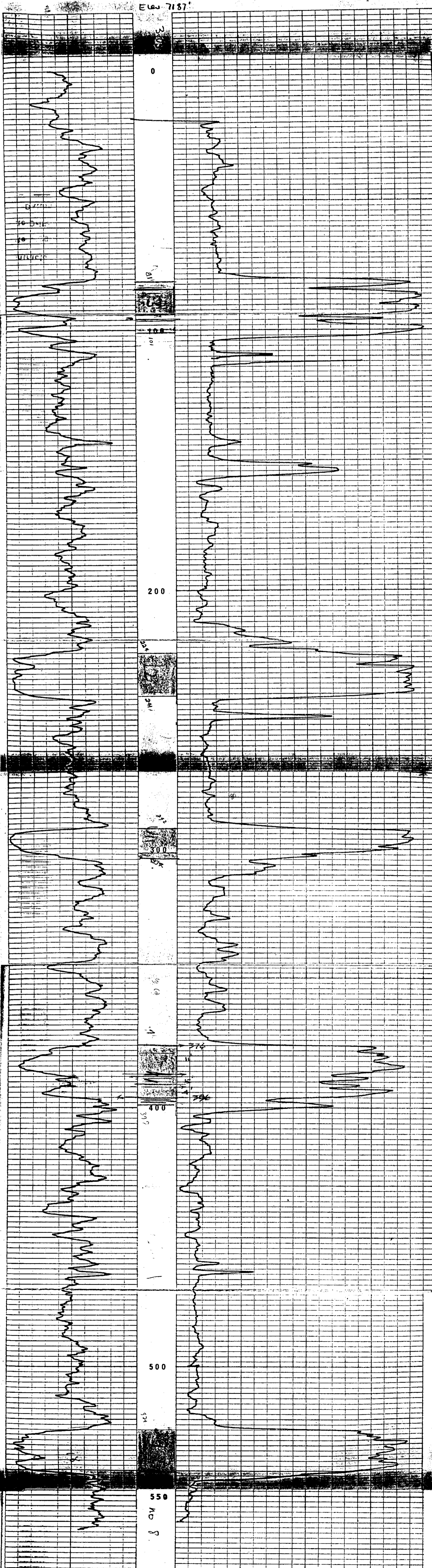
BOREHOLE DATA

Customer FORDING COAL	Drillers Depth	Hole Diameters	Casing Details
Contractor	Logging Depth 563'		
Date Logged 31:7:70	Cement		
Date Drilled	Mud Weight WATER.		
Log Datum GROUND LEVEL			

COMMENTS

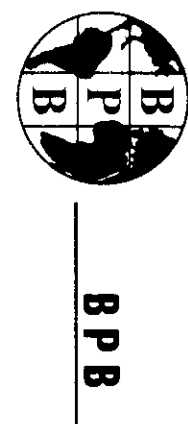
CALIBRATION AND SCALES

Track 1	Depth	Track 2	Track 3
gamma		h r density	
0	125	5000	8500
		3000	6500



312

K-Factors 2012A-1



BPB INDUSTRIES LTD

H. R. DENSITY DETAIL LOG

30 4 BOREHOLE

312

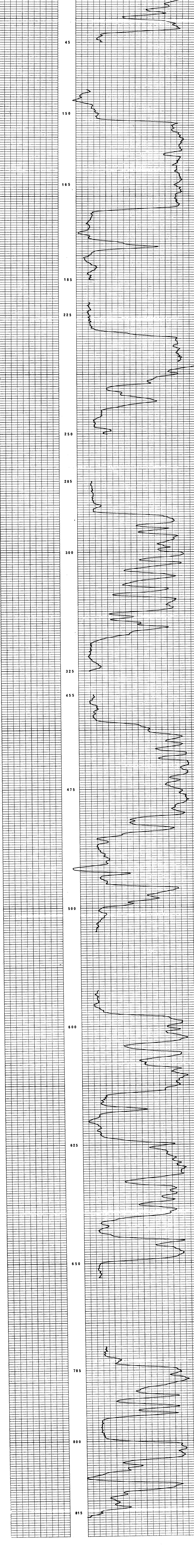
BOREHOLE DATA

Customer <small>FORDING RIVER</small>	Drillers Depth	Hole Diameters	Casing Details
Contractor	Logging Depth 816'		
Date Logged 23-7-70	Cement		
Date Drilled	Mud Weight WATER		
Log Datum <small>GROUND LEVEL</small>			

COMMENTS

CALIBRATION AND SCALES

Track 1	Depth	Track 2	Track 3
	5000	ABOVE 235'	8500
	3000	BELOW 235'	6500



K-FAKONAS 20/3/201

# ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

## GAMMA RAY NEUTRON LOG

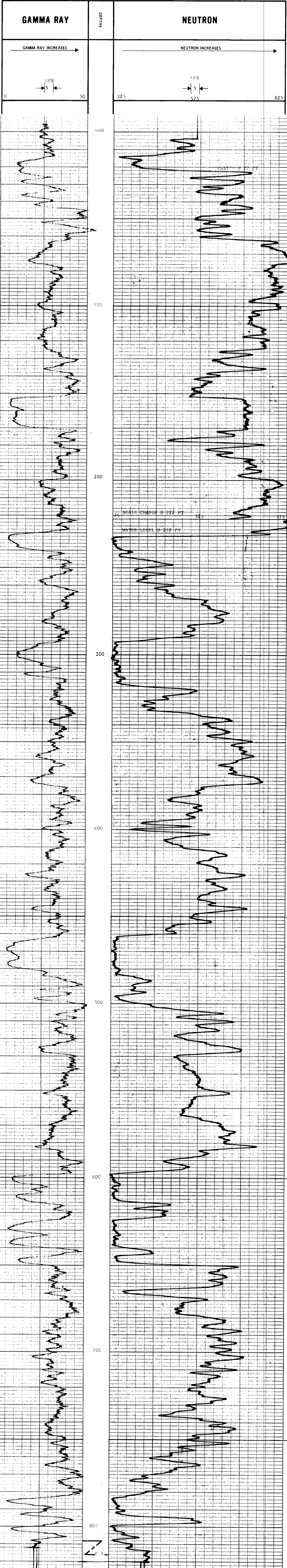
FILE NO.	COMPANY	FORBING COAL LIMITED
WELL	WELL NO.	DDH 304
LOCATION	LOC.	EAGLE MOUNTAIN
PROV.	FIELD	FORBING RIVER
	PROV.	BRITISH COLUMBIA
Permanent Datum	GROSS LEVEL	Feet
Log Measured from	GENERAL LEVEL	Feet Above Perm. Datum
Well Depths Measured from		G.L.
Run No.	ONE	
Date	11 JULY 70	
First Reading	816	
Last Reading	0	
Footage Logged	816	
Depth Reached	812	
Depth Driller	??	
Casing Driller	??	
Casing Type	1" AUSTON	
Liquid Level	???	
Min. Diam.		
Operating Time	3 HOURS	
Track No.	20	
Recorded By	HANKS	Witnessed By
		MCFARLAND

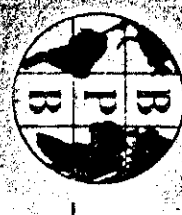
# 312

EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/8"	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	1 1/8"
TYPE	GEIGER	DETECTOR MODEL NO.	
LENGTH	18 INCH	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	8.55 FT	LENGTH	6 INCH
		SOURCE MODEL NO.	MRC-N-SS-W
		SERIAL NO.	598
HOIST TRUCK NO.	20	SPACING	19 FT CH
INSTRUMENT TRUCK NO.		TYPE	AmBe
TOOL SERIAL NO.	CCN2714A65	STRENGTH	6.94 x 10 <sup>6</sup> N/S

LOGGING DATA												
RUN NO.	GENERAL		T.C. SEC.	GAMMA RAY				T.C. SEC.	NEUTRON			
	FROM	TO		SPEED FT/MIN	SENS SETTINGS	ZERO DIV. L OR R	API GR. UNITS PER LOG DIV.		SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.	
1	0	222	11	3	25	0L	5 cps	3	5	13L	25 cps	
	222	816	11	3	25	0L	5 cps	3	5	21	25 cps	





BPB INDUSTRIES LTD

K-FOSSING 7/13/71

GAMMA & H.R. DENSITY LOG

305 BOREHOLE

312

BOREHOLE DATA

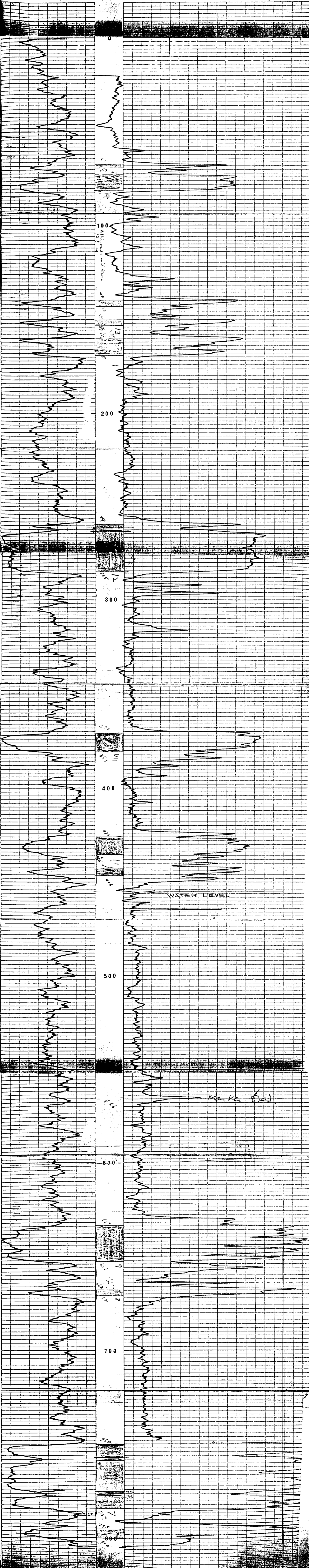
Customer <b>FOSSING RIVER</b>	Drillers Depth	Hole Diameters	Casing Details
Contractor	Logging Depth <b>805'</b>		
Date Logged <b>2-17-70</b>	Cement		
Date Drilled	Mud Weight <b>WATER</b>		
Log Datum <b>GROUND LEVEL</b>			

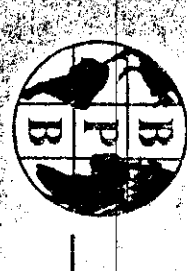
COMMENTS

WATER LEVEL #65'

CALIBRATION AND SCALES

Track 1	Depth	Track 2	Track 3
<b>gamma</b>	<b>305</b> 21-72-72	<b>h r density</b> ABOVE 465' BELOW 465'	<b>9200</b> 7000
	5700 3500		





B.P.B. INDUSTRIES LTD

K-Feeding 70(3)A

GAMMA & H.R. DENSITY LOG

MARKED  
306 BOREHOLE

312

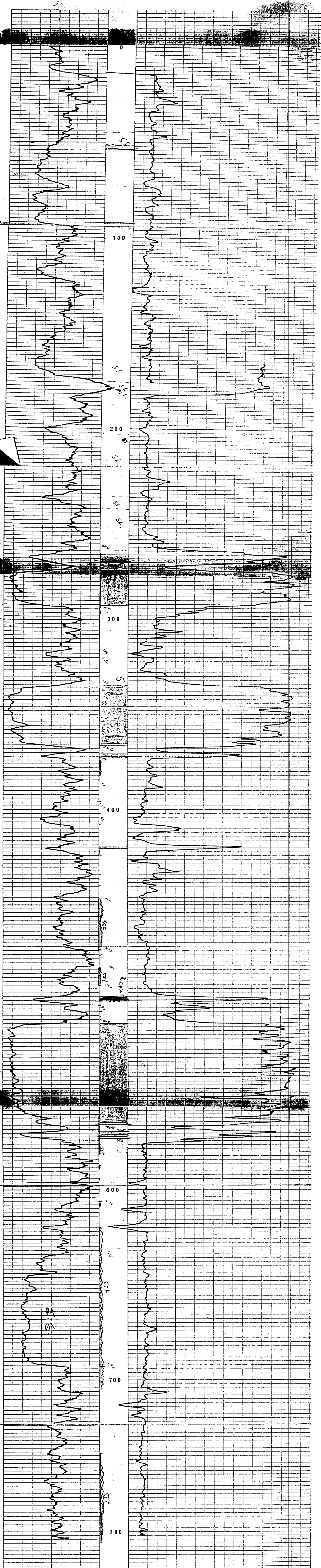
BOREHOLE DATA

Customer <b>FEEDING COAL</b>	Drillers Depth	Hole Diameters	Casing Details
Contractor	Logging Depth <b>784'</b>		
Date Logged <b>2:8:70</b>	Cement		
Date Drilled	Mud Weight <b>WATER</b>		
Log Datum <b>GROUND LEVEL</b>			

COMMENTS

CALIBRATION AND SCALES

Track 1	Depth	Track 2	Track 3
<b>gamma</b>		<b>h r density</b>	
0	125	ABOVE 182'	8500
		BELOW 182'	6500



K- FROZING 7013/A-1

# ROKE

GAMMA RAY NEUTRON LOG

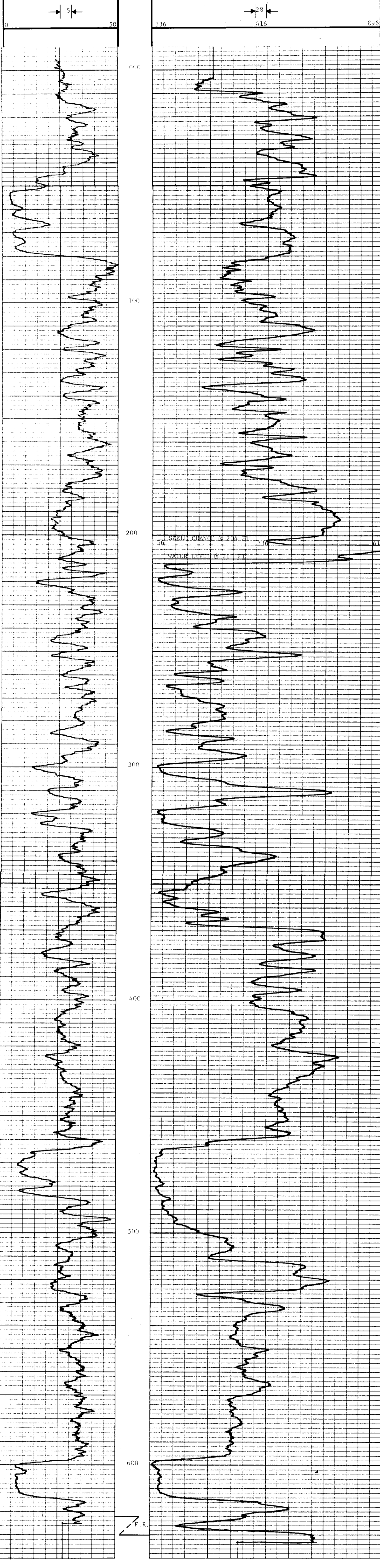
OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	COMPANY	FORDING COAL LIMITED
LSD	WELL	DRH 307
SEC	TWP	
RGE	LOCATION	EAGLE MOUNTAIN
M	FIELD	FORDING RIVER
M	PROVINCE	BRITISH COLUMBIA
Permanent Datum	SEA LEVEL	Elv. _____
Log Measured from	ARBITRARY LEVEL	Fl. Above Perm. Datum _____
Well Depths Measured from		D.F. _____
Run No.	ONE	
Date	13 SEPT 70	
Fast Reading	630	
Fast Reading	0	
Footage Logged	630	
Depth Reached	631	
Depth Driller	637	
Casing Driller		
Fluid Type	WATER	
Liquid Level	211	
Min. Diam.		
Operating Time	3 HOURS	
Truck No.	20	
Recorded By	P. THORSON	Witnessed By
		TAPLIN

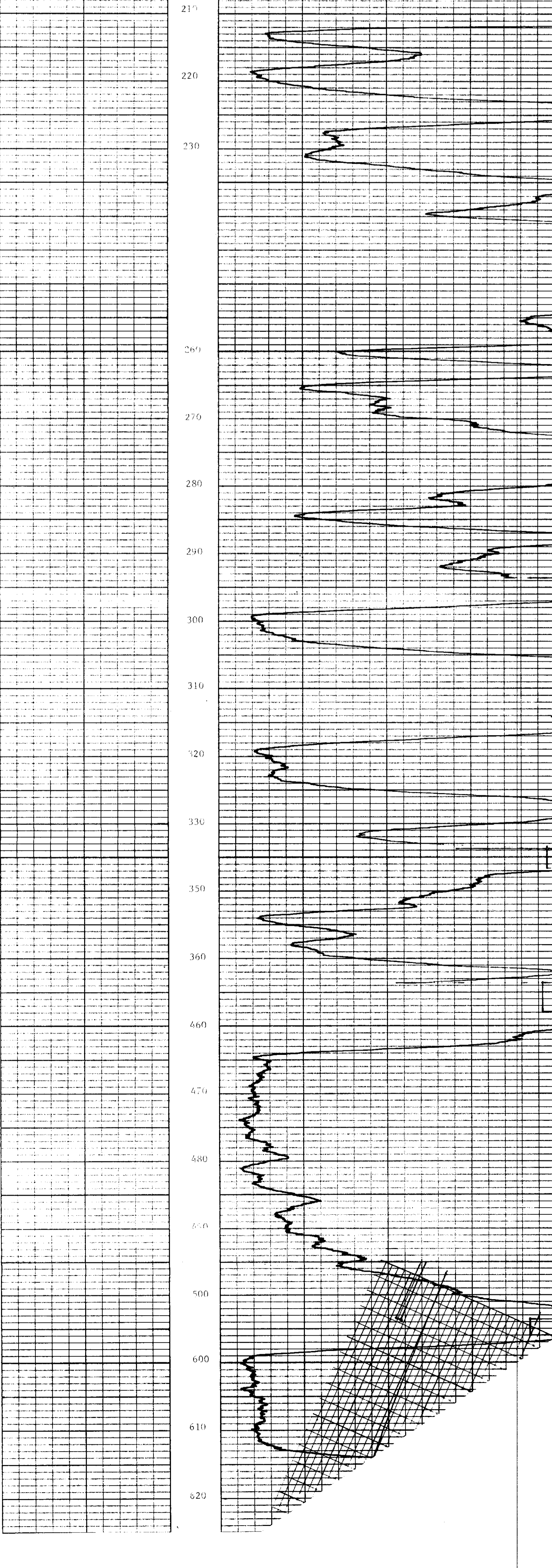
EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/8	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	1 1/8
TYPE	GEIGER	DETECTOR MODEL NO.	
LENGTH	18 INCH	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	8.55 FT	LENGTH	6 INCH
		SOURCE MODEL NO.	MRC-N-SS-W
		SERIAL NO.	598
HOIST TRUCK NO.	20	SPACING	19 INCH
INSTRUMENT TRUCK NO.		TYPE	AmBe
TOOL SERIAL NO.	CGN27U4A65	STRENGTH	6.94 x 10 <sup>6</sup> N/S

LOGGING DATA											
GENERAL			GAMMA RAY				NEUTRON				
RUN NO.	DEPTHS	SPEED	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API G. R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.	
1	000 TO 204	11	4	25	0	5 CPS	4	4	12L	28 CPS	
	204 TO 630	11	4	25	0	5 CPS	4	4	2L	28 CPS	

REMARKS



REPEAT SECTIONS - EXPANDED NEUTRON





# ROKE

GAMMA RAY NEUTRON LOG

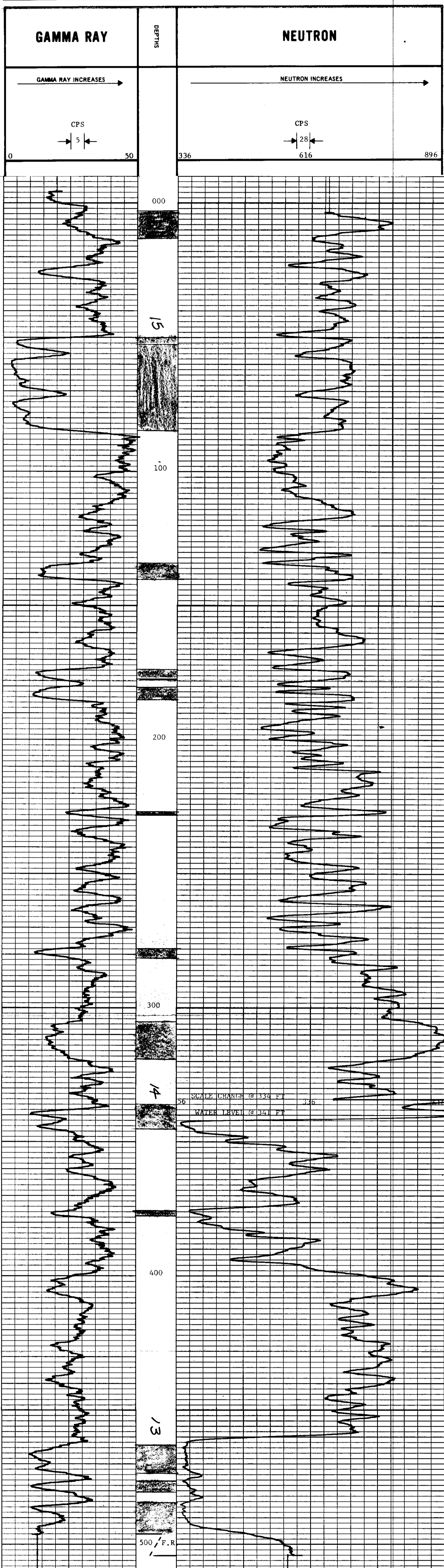
OIL ENTERPRISES LTD. CALGARY, ALBERTA

K - FROSTING 20651A

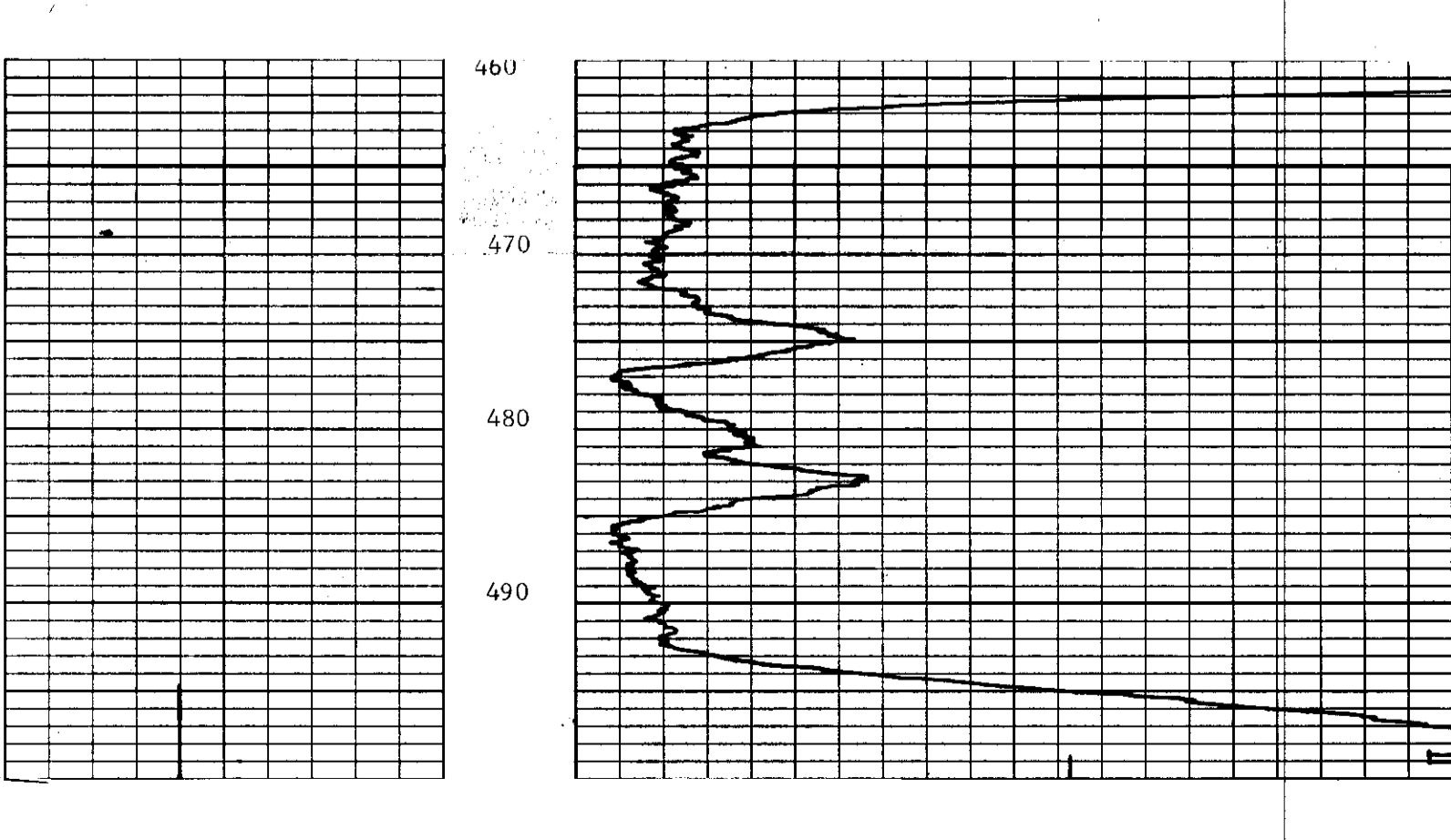
FILE NO.	COMPANY	FORDING COAL LIMITED
LSD	WELL	RI 308
SEC	LOCATION	EAGLE MOUNTAIN
TWP	RGE	FORDING RIVER
RGE	FIELD	
W	M	
PROVINCE	BRITISH COLUMBIA	
Permanent Datum	GROUND LEVEL	Elev. _____
Log Measured from	GROUND LEVEL	Fl. Above Perm. Datum _____
Well Depths Measured from		G.L. _____
Run No.	ONE	
Date	8 OCT 70	
First Reading	504	
Last Reading	0	
Footage Logged	504	
Depth Reached	505	
Depth Driller		
Casing Driller		
Fluid Type	WATER	
Liquid Level	341	
Min. Diam.		
Operating Time	3 HOURS	
Truck No.	20	
Recorded By	PETERSON	Witnessed By
		PEARSON

EQUIPMENT DATA						
GAMMA RAY		NEUTRON				
RUN NO.	ONE	RUN NO.	ONE			
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON			
DIAMETER	1 1/2	TOOL MODEL NO.				
DETECTOR MODEL NO.		DIAMETER	1 1/2			
TYPE	GEIGER	DETECTOR MODEL NO.				
LENGTH	18 INCH	TYPE	PROPORTIONAL			
DISTANCE TO N. SOURCE	8.55 FT	LENGTH	6 INCH			
		SOURCE MODEL NO.	MRC-N-SS-W			
		SERIAL NO.	598			
		SPACING	19 INCH			
		TYPE	AmBe			
		STRENGTH	6.94 x 10 <sup>6</sup> N/S			
LOGGING DATA						
GENERAL			GAMMA RAY		NEUTRON	
RUN NO.	DEPTHS	SPEED FT/MIN	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	0 334	11	4	25	0	5 CPS
	334 504	11	4	25	0	5 CPS

REMARKS



EXPANDED NEUTRON



# ROKE

GAMMA RAY NEUTRON LOG

K-LOGGING 70628-1

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	COMPANY	FORDING COAL LIMITED
WELL	W	RH 308 (308)
LOCATION	EAGLE MOUNTAIN	
FIELD	FORDING RIVER	
PROVINCE	BRITISH COLUMBIA	
PERMITS	GROUND LEVEL	Elev. _____
LOG MEASURED FROM	FROM KRODINI LEVEL	Ft. Above Perm. Datum _____
WELL DEPTH MEASURED FROM	G.L.	_____
Run No.	ONE	
Date	8 OCT 70	
First Reading	504	
Last Reading	0	
Footage Logged	504	
Depth Reached	505	
Depth Driller		
Casing Driller		
Fluid Type	WATER	
Liquid Level	341	
Min. Diam.		
Operating Time	3 HOURS	
Truck No.	20	
Recorded By	PETERSON	Witnessed By PEARSON

**312**

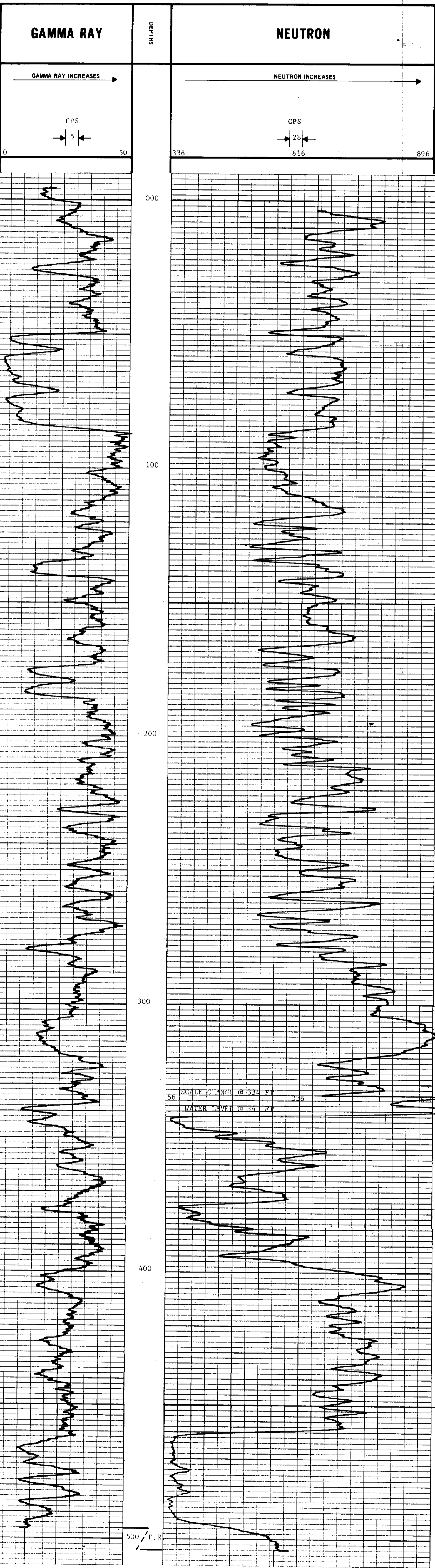
### EQUIPMENT DATA

GAMMA RAY				NEUTRON			
RUN NO.	ONE			RUN NO.	ONE		
TOOL MODEL NO.	1 1/2			LOG TYPE	NEUTRON/NEUTRON		
DIAMETER	1 1/2			TOOL MODEL NO.	1 1/2		
DETECTOR MODEL NO.	GEIGER			DETECTOR MODEL NO.	PROPORTIONAL		
LENGTH	18 INCH			TYPE	6 INCH		
DISTANCE TO N. SOURCE	8.55 FT			SOURCE MODEL NO.	MRC-N-SS-W		
GENERAL				SERIAL NO.	598		
HOIST TRUCK NO.	20			SPACING	19 INCH		
INSTRUMENT TRUCK NO.				TYPE	AmBe		
TOOL SERIAL NO.	CGN2714A65			STRENGTH	6.94 x 10 <sup>6</sup> N/S		

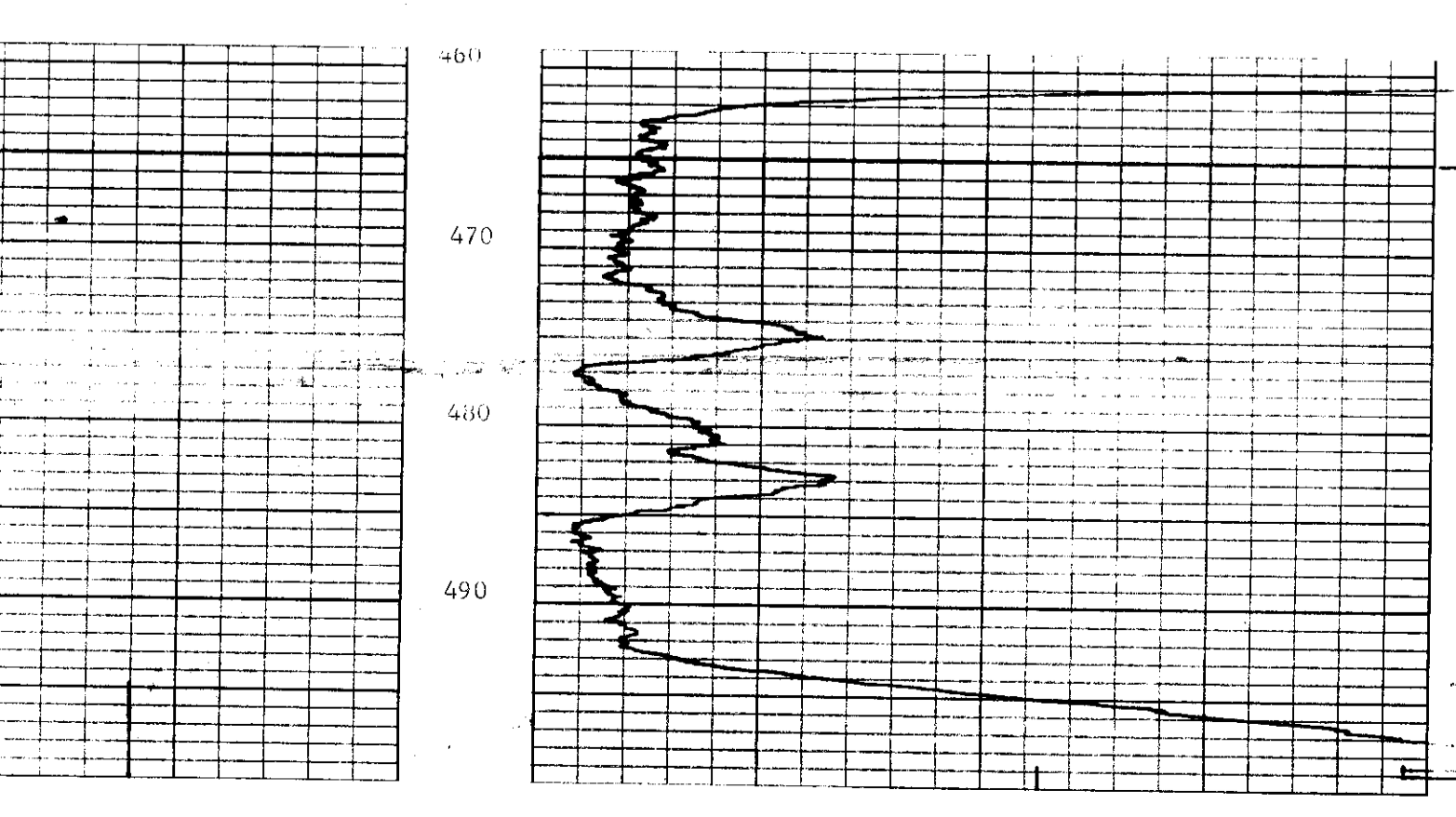
### LOGGING DATA

RUN NO.	GENERAL DEPTHS		SPEED FT/MIN	T.C. SEC.	GAMMA RAY			NEUTRON			
	FROM	TO			SENS SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	0	334	11	4	25	0	5 CPS	4	4	12L	28 CPS
	334	504	11	4	25	0	5 CPS	4	4	2L	28 CPS

REMARKS



### EXPANDED NEUTRON



# ROKE

GAMMA RAY NEUTRON LOG

K-LOG-2013/24

OIL ENTERPRISES LTD. CALGARY, ALBERTA

COMPANY **FORDING COAL LIMITED**

WELL **DDH 309**

LOCATION **ESKLE MOUNTAIN**

FIELD **FORDING RIVER.**

PROVINCE **BRITISH COLUMBIA**

Permanent Datum **GROUND LEVEL** Elev. \_\_\_\_\_

Log Measured from **GROUND LEVEL** Ft. Above Perm. Datum \_\_\_\_\_

Well Depths Measured from \_\_\_\_\_

Run No. **ONE**

Date **25 SEP 170**

First Reading **340**

Last Reading **000**

Footage Logged **340**

Depth Reached **341**

Depth Driller \_\_\_\_\_

Casing Note \_\_\_\_\_

Casing Driller \_\_\_\_\_

LSD \_\_\_\_\_

SEC \_\_\_\_\_

TYP \_\_\_\_\_

RCE \_\_\_\_\_

W \_\_\_\_\_

M \_\_\_\_\_

K.B. \_\_\_\_\_

D.F. \_\_\_\_\_

C.L. \_\_\_\_\_

Fluid Type **WATER**

Liquid Level **46 FT**

Mfn. Diam. \_\_\_\_\_

Operating Time **3 HRS.**

Truck No. **20**

Recorded By **PETERSON**

Witnessed By **PEARSON**

# 312

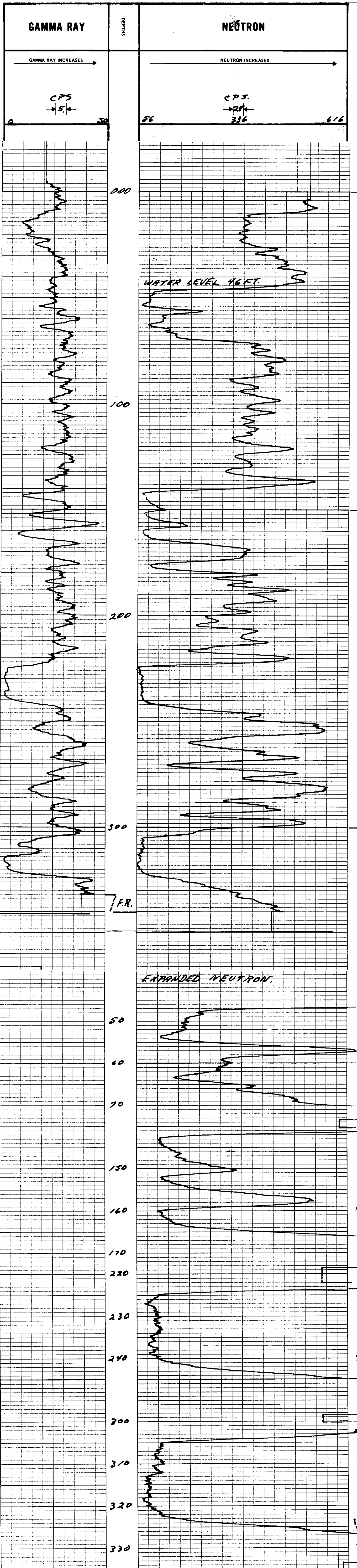
### EQUIPMENT DATA

GAMMA RAY				NEUTRON			
RUN NO.	<b>ONE</b>			RUN NO.	<b>ONE</b>		
TOOL MODEL NO.				LOG TYPE	<b>NEUTRON/NEUTRON</b>		
DIAMETER	<b>1 1/2</b>			TOOL MODEL NO.			
DETECTOR MODEL NO.				DIAMETER	<b>1 1/2</b>		
TYPE	<b>GEIGER</b>			DETECTOR MODEL NO.			
LENGTH	<b>18 INCH</b>			TYPE	<b>PROPORTIONAL</b>		
DISTANCE TO N. SOURCE	<b>8.55 FT</b>			LENGTH	<b>6 INCH</b>		
GENERAL				SOURCE MODEL NO.	<b>MRC-N-SS-W</b>		
HOIST TRUCK NO.	<b>#20</b>			SERIAL NO.	<b>598</b>		
INSTRUMENT TRUCK NO.				SPACING	<b>19 INCH.</b>		
TOOL SERIAL NO.	<b>662704A65</b>			TYPE	<b>AmBe</b>		
				STRENGTH	<b>6.94 x 10<sup>6</sup> N/S</b>		

### LOGGING DATA

GENERAL			GAMMA RAY				NEUTRON				
RUN NO.	DEPTHS		SPEED FT/MIN	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API GR UNITS PER LOG DIV	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV
	FROM	TO									
1	000	340	11	4	25	0	5 CPS.	4	4	26	28 CPS.

REMARKS



# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

K-100106 7/15/64

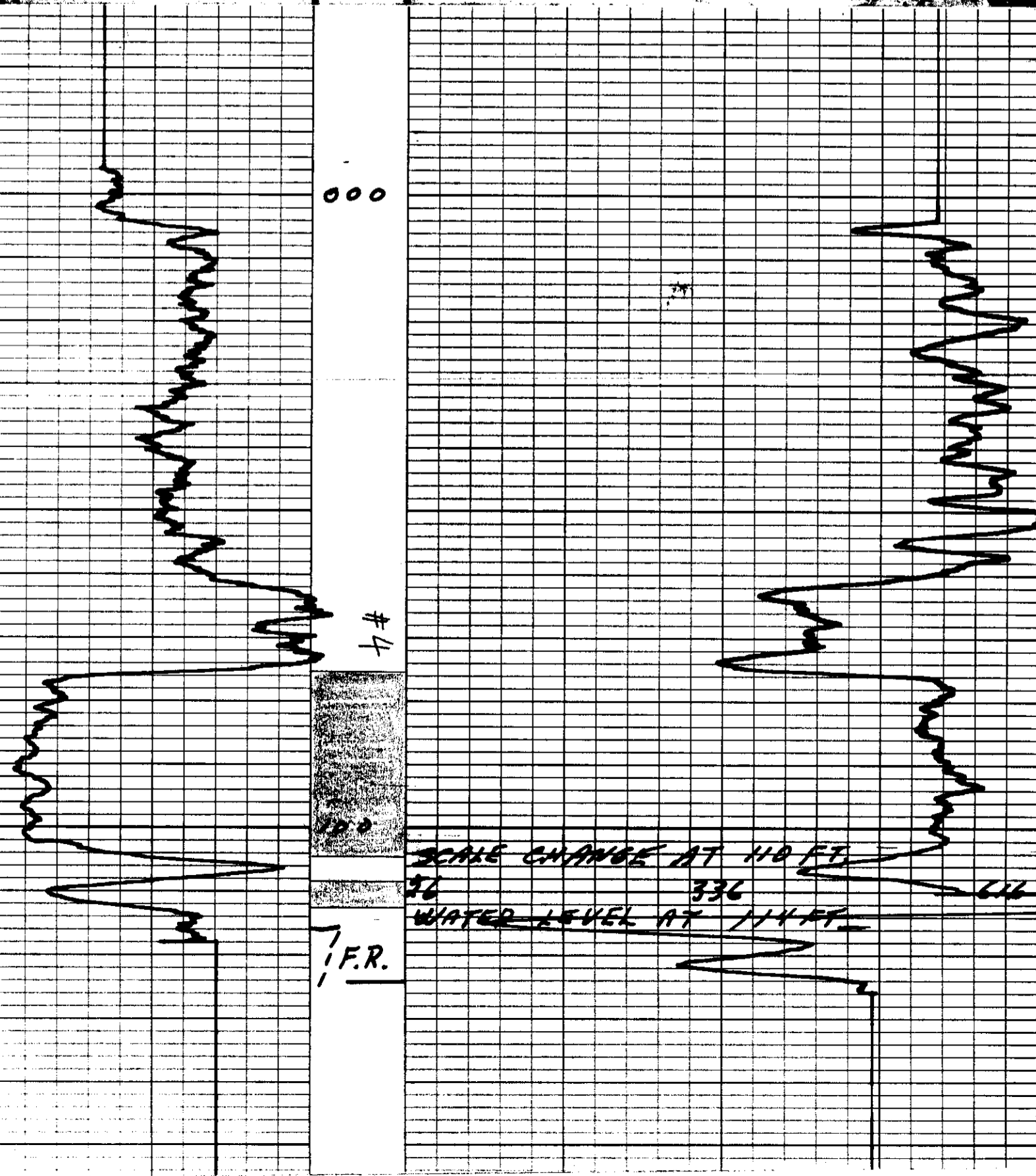
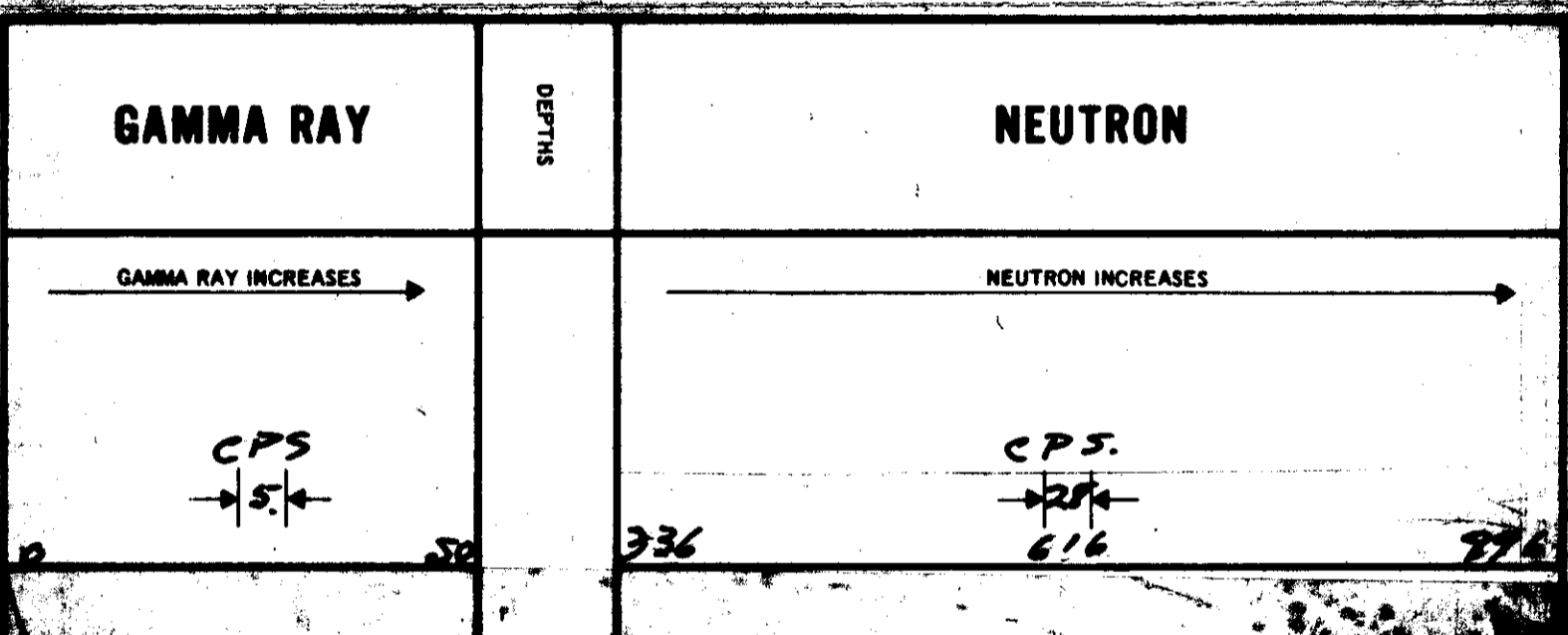
FILE NO.	COMPANY <b>HOODING COAL LIMITED</b>
WELL <b>RY 310</b>	LOCATION <b>EAGLE MOUNTAIN</b>
SEC	FIELD <b>FORDING RIVER</b>
TWP	PROVINCE <b>BRITISH COLUMBIA</b>
RANGE	
W	
M	
Permanent Datum <b>GROUND LEVEL</b>	Elev. _____
Log Measured from <b>GROUND LEVEL</b>	Fl. Above Perm. Datum _____
Well Depths Measured from _____	K.B. _____
	D.F. _____
	G.L. _____
Run No. <b>ONE</b>	Date <b>7.12.170</b>
First Reading <b>129</b>	
Last Reading <b>000</b>	
Footage Logged <b>129</b>	
Depth Reached <b>125</b>	
Depth Driller	
Casing Rocks	
Casting Driller	
Fluid Type <b>WATER</b>	
Liquid Level <b>114 FT.</b>	
Min. Diam.	
Operating Time <b>3 HRS.</b>	
Truck No. <b>20</b>	
Recorded By <b>PETERSON</b>	Witnessed By <b>PEARSON</b>

312

EQUIPMENT DATA	
GAMMA RAY	NEUTRON
RUN NO. <b>ONE</b>	RUN NO. <b>ONE</b>
TOOL MODEL NO.	LOG TYPE <b>NEUTRON/NEUTRON</b>
DIAMETER <b>1 1/2</b>	TOOL MODEL NO.
DETECTOR MODEL NO.	DIAMETER <b>1 1/2</b>
TYPE <b>GEIGER</b>	DETECTOR MODEL NO.
LENGTH <b>18 INCH</b>	TYPE <b>PROPORTIONAL</b>
DISTANCE TO N. SOURCE <b>8.35 FT</b>	LENGTH <b>6 INCH</b>
	SOURCE MODEL NO. <b>MRC-N-69-W</b>
GENERAL	SERIAL NO. <b>578</b>
HOIST TRUCK NO. <b>#20</b>	SPACING <b>19 INCH.</b>
INSTRUMENT TRUCK NO.	TYPE <b>AmBe</b>
TOOL SERIAL NO. <b>CGN2709A65</b>	STRENGTH <b>6.94 x 10<sup>6</sup> N/S</b>

LOGGING DATA											
RUN NO.	GENERAL		GAMMA RAY				NEUTRON				
	FROM	TO	SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	000	110	11	4	25	0	5 CPS.	4	4	126	27 CPS.
	114	129	11	4	25	0	5 CPS.	4	4	26	28 CPS.

REMARKS



# ROKE

GAMMA RAY NEUTRON LOG

R-forecasts 7/2/51-1

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO. \_\_\_\_\_

COMPANY **FOODING COAL LIMITED**

WELL **RH 311**

LOCATION **EGGLE MOUNTAIN**

FIELD **FOODING RIVER**

PROVINCE **BRITISH COLUMBIA**

Permanent Datum **GARDNER LAKE** Elev. \_\_\_\_\_ K.B. \_\_\_\_\_  
 Log Measured from **CEMUND LEVEL** Ft. Above Perm. Datum \_\_\_\_\_ D.F. \_\_\_\_\_  
 Well Depths Measured from \_\_\_\_\_ G.L. \_\_\_\_\_

Run No. **ONE**

Date **4 DEC 70**

First Reading **426**

Last Reading **0**

Footage Logged **0**

Depth Reached **426**

Depth Dialer **427**

Depth Dialer **427**

Casing Driller \_\_\_\_\_

Fluid Type **AIR/LINER**

Liquid Level **212**

Min. Diam. **3 7/8**

LSD \_\_\_\_\_

SEC \_\_\_\_\_

TWP \_\_\_\_\_

RGE \_\_\_\_\_

W \_\_\_\_\_

M \_\_\_\_\_

Operating Time **2 HRS**

Truck No. **10**

Recorded By **BRANKS**

Witnessed By **TRAWN**

# 312

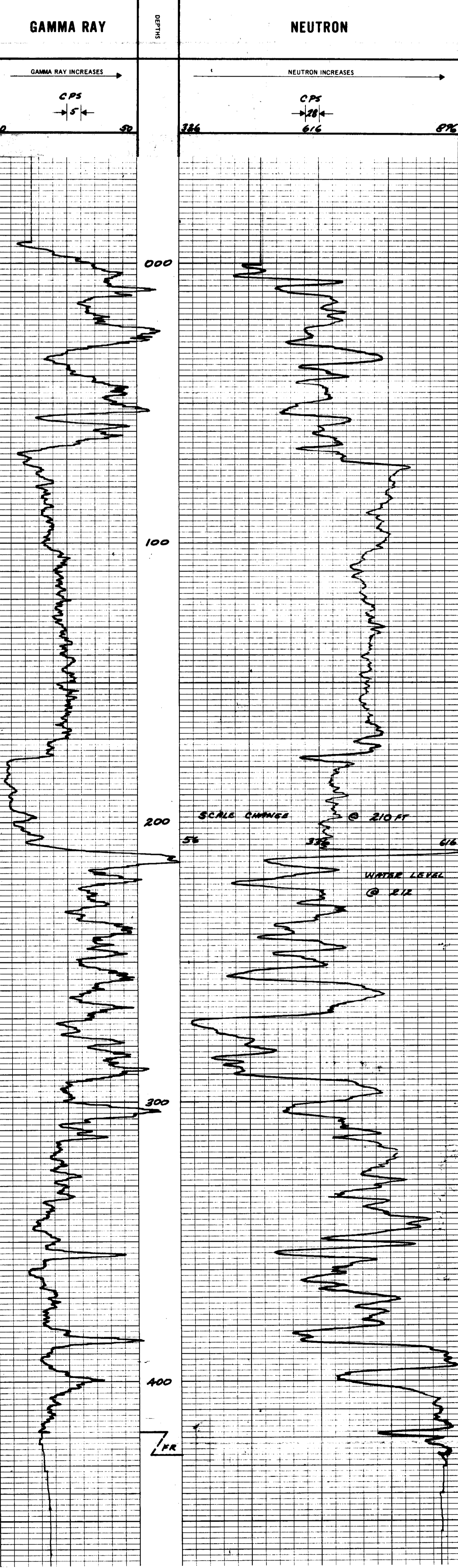
### EQUIPMENT DATA

GAMMA RAY				NEUTRON			
RUN NO.	<b>ONE</b>			RUN NO.	<b>ONE</b>		
TOOL MODEL NO.	<b>1H</b>			LOG TYPE	<b>NEUTRON/NEUTRON</b>		
DIAMETER	<b>1 1/2</b>			TOOL MODEL NO.	<b>1H</b>		
DETECTOR MODEL NO.	<b>GEIGER</b>			DIAMETER	<b>1 1/2</b>		
TYPE	<b>GEIGER</b>			DETECTOR MODEL NO.	<b>PROPORTIONAL</b>		
LENGTH	<b>18 INCH</b>			LENGTH	<b>6 INCH</b>		
DISTANCE TO N. SOURCE	<b>8.53 FT</b>			SOURCE MODEL NO.	<b>MRC-N-SS-W</b>		
GENERAL				SERIAL NO.	<b>606</b>		
HOIST TRUCK NO.	<b>10</b>			SPACING	<b>19 INCH</b>		
INSTRUMENT TRUCK NO.	<b>CGN 2704A 70</b>			TYPE	<b>AmBe</b>		
TOOL SERIAL NO.	<b>CGN 2704A 70</b>			STRENGTH	<b>7.00x10<sup>6</sup> N/S</b>		

### LOGGING DATA

RUN NO.	DEPTHS		SPEED FT/MIN	T.C. SEC.	GAMMA RAY			NEUTRON			
	FROM	TO			ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.	
1	0	210	11	3	25	0L	5 CPS	3	4.2	12L	28 CPS
	210	426	11	3	25	0L	5 CPS	3	4.2	2L	28 CPS

REMARKS



Cable Marking  
 RH 400 to RH 403  
 MA RAY NEUTRON LOG

**NOVEL**  
 OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO. \_\_\_\_\_  
 COMPANY FORDING COAL LIMITED  
 WELL DJH 400  
 TWP CASTLE MOUNTAIN  
 RGE \_\_\_\_\_  
 M \_\_\_\_\_  
 FIELD FORDING RIVER  
 PROVINCE BRITISH COLUMBIA

**312**

Permanent Datum GROUND LEVEL Elev. \_\_\_\_\_ K.B. \_\_\_\_\_  
 Log Measured from GROUND LEVEL Ft. Above Perm. Datum O.F. \_\_\_\_\_  
 Well Depth Measured from \_\_\_\_\_ G.L. \_\_\_\_\_

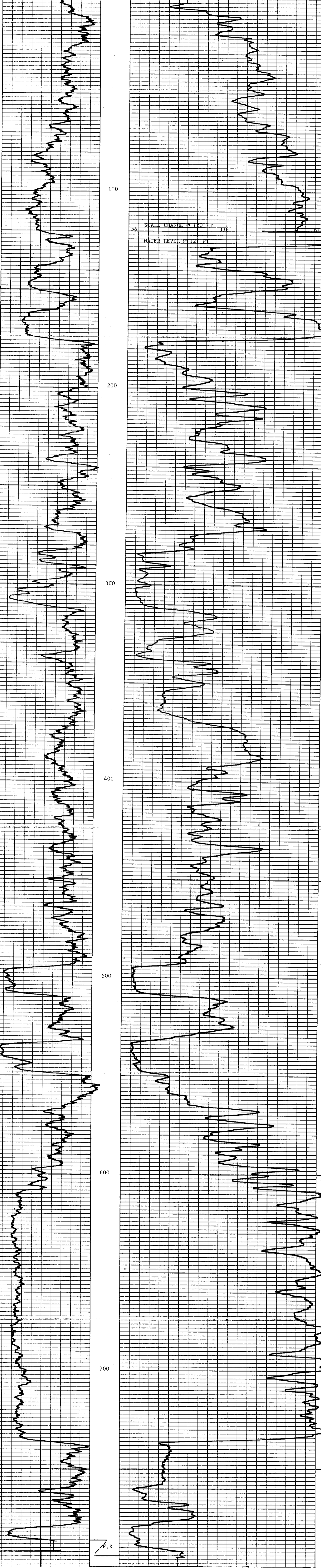
Run No. (ONE)  
 Date 12 SEPT 70  
 First Reading 794  
 Last Reading 0  
 Footage Logged 794  
 Depth Reached 795  
 Depth Driller 806  
 Casing Driller \_\_\_\_\_

Fluid Type WATER  
 Liquid Level 127  
 Min. Diam. \_\_\_\_\_  
 Operating Time 3 HOURS  
 Truck No. 20  
 Recorded By PATTERSON Witnessed By TAPLIN

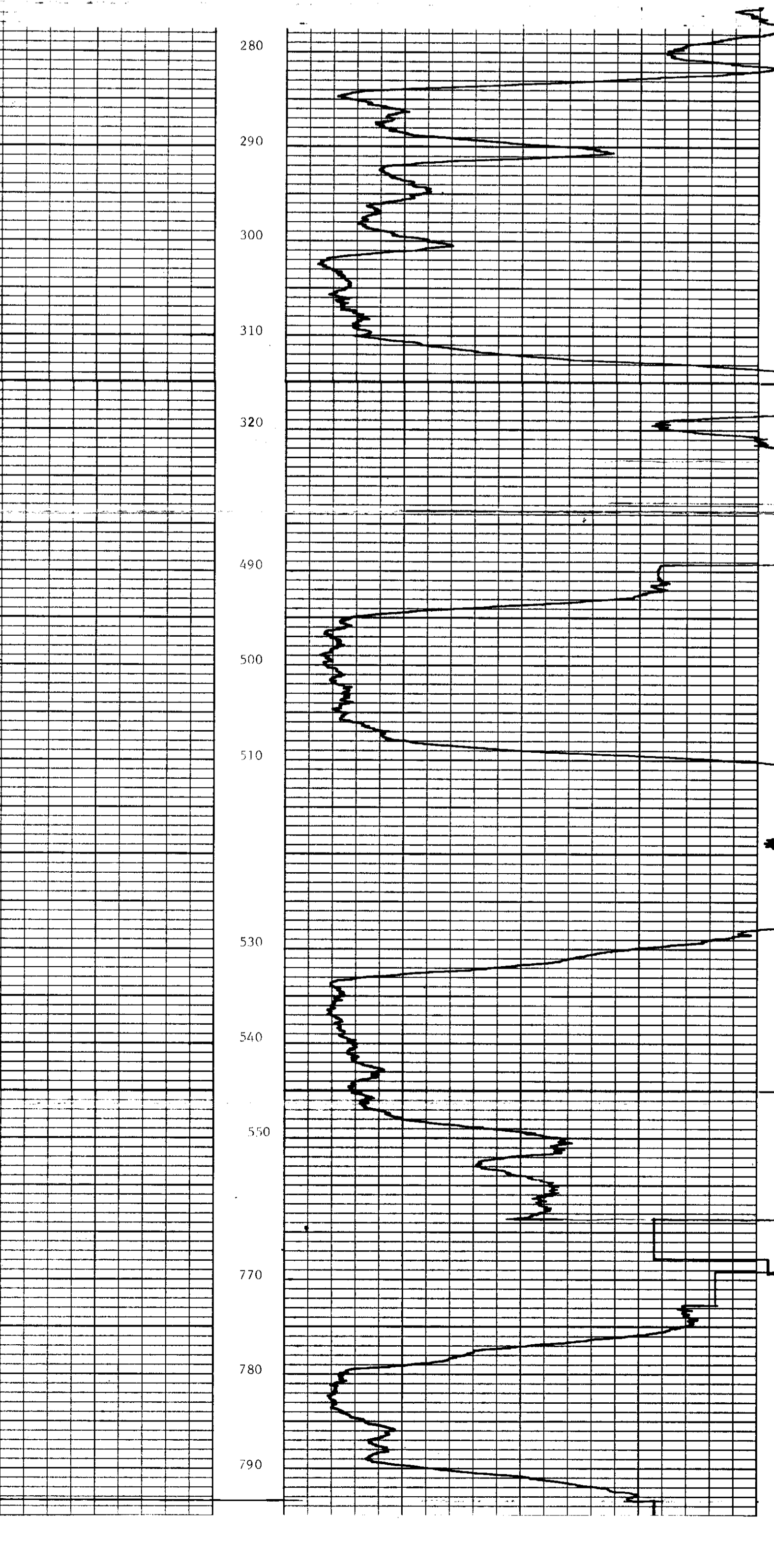
EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/2	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	1 1/2
TYPE	GEIGER	DETECTOR MODEL NO.	
LENGTH	18 INCH	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	8.55 FT	LENGTH	6 INCH
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	598
HOIST TRUCK NO.	10 20	SPACING	19 INCH
INSTRUMENT TRUCK NO.		TYPE	AmBe
TOOL SERIAL NO.	CGN27U4A65	STRENGTH	6.94 x 10 <sup>6</sup> N/S

LOGGING DATA											
RUN NO.	GENERAL			T.C. SEC.	GAMMA RAY			NEUTRON			
	FROM	TO	SPEED FT/MIN		SENS SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	000	120	11	4	25	0	5 CPS	4	4	2L	28 CPS
	120	794	11	4	25	0	5 CPS	4	4	2L	28 CPS

REMARKS



REPEAT SECTIONS - EXPANDED NEUTRON



K-1-FR-001-70(5)A-1

# ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

FILE NO. COMPANY **PARSONS CORP. LIMITED**

WELL **D.D.H. # 101**

LOCATION **BLISS MOUNTAIN**

FIELD **FERRIS RIVER**

PROVINCE **BRITISH COLUMBIA**

LOG MEASURED FROM: K/B  
 FEET ABOVE PERM. QUARTZ: D/F  
 WELL DEPTH MEASURED FROM: G/L

DATE **ONE**

FIRST READING **2580**

LAST READING **787**

FOOTLOG LOGGED **907**

DEPTH REACHED **798**

DEPTH DRIER **308**

CASING DRIER

FLUID TYPE **WATER**

LIQUID LEVEL **141 FT.**

MIN. DAMM

OPERATING TIME **3 HRS.**

TRUCK NO. **20**

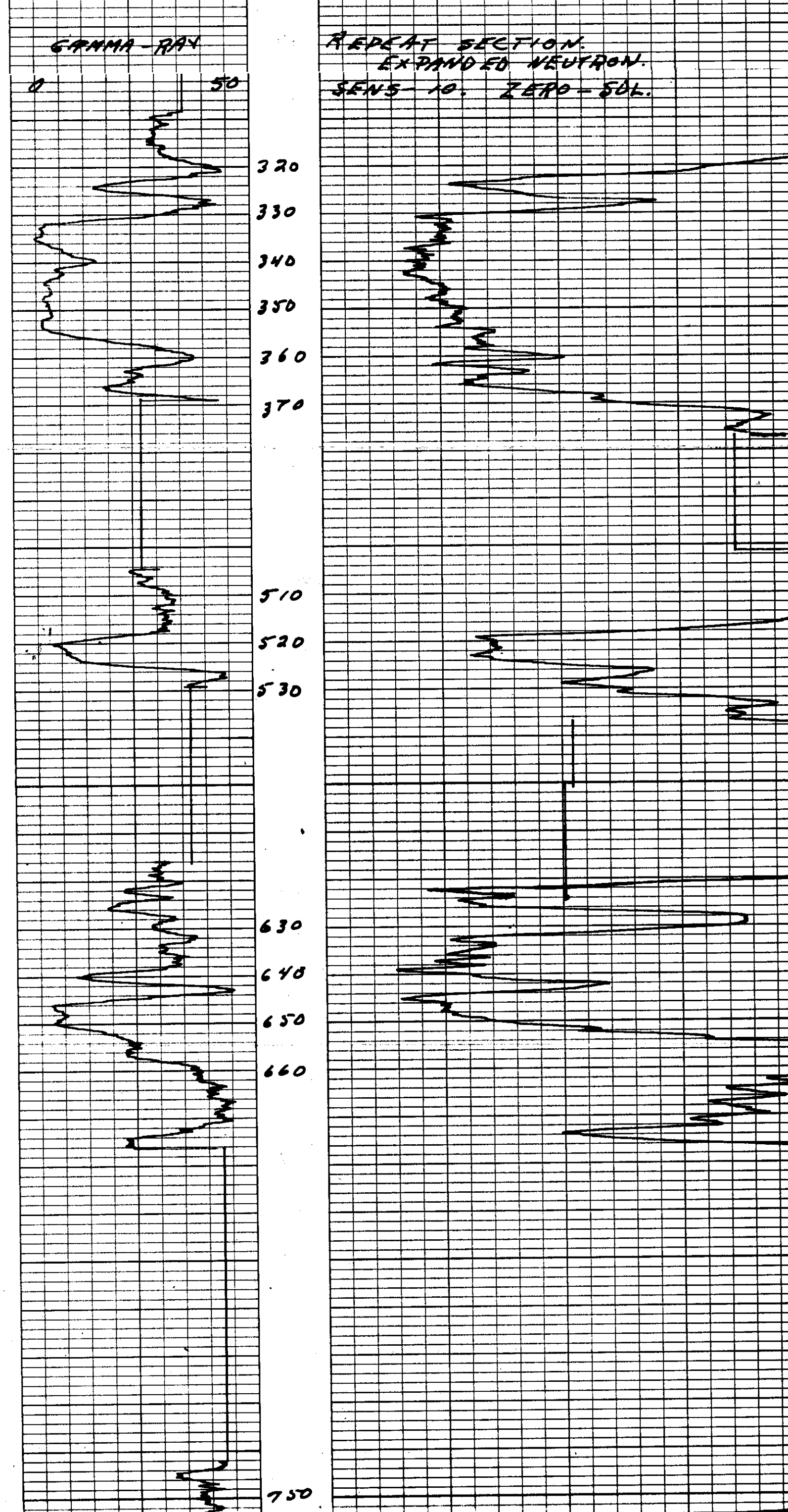
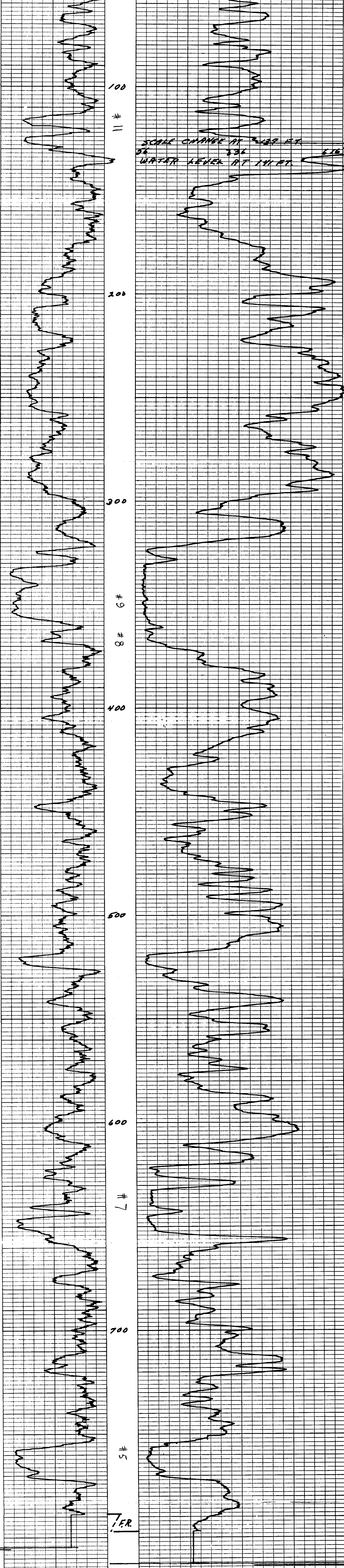
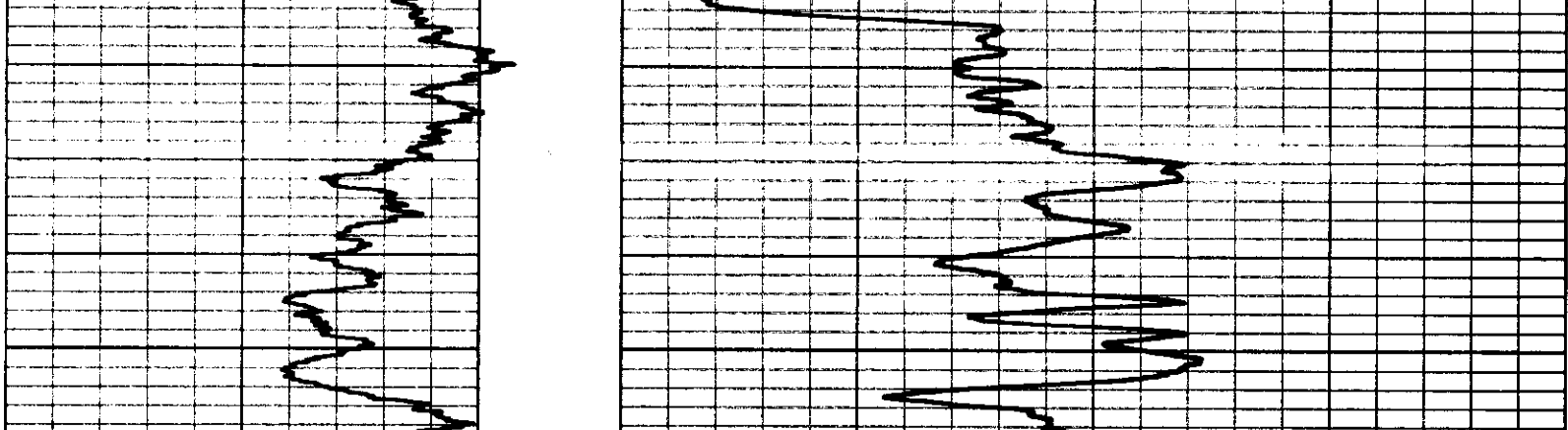
RECORDED BY **PEARSON**

WITNESSED BY **PEARSON**

GAMMA RAY				NEUTRON			
RUN NO.	<b>ONE</b>			RUN NO.	<b>ONE</b>		
TOOL MODEL NO.				LOG TYPE	NEUTRON/NEUTRON		
DIAMETER	<b>1 1/2</b>			TOOL MODEL NO.			
DETECTOR MODEL NO.				DIAMETER	<b>1 1/2</b>		
TYPE	GEIGER			DETECTOR MODEL NO.			
LENGTH	<b>18 INCH</b>			TYPE	PROPORTIONAL		
DISTANCE TO N. SOURCE	<b>8.55 FT</b>			LENGTH	<b>6 INCH</b>		
				SOURCE MODEL NO.	MRC-N-SS-W		
				SERIAL NO.	<b>571</b>		
				SPACING	<b>19 INCH</b>		
HOIST TRUCK NO.	<b>4020</b>			TYPE	AmBe		
INSTRUMENT TRUCK NO.				STRENGTH	<b>6.94 x 10<sup>6</sup> N/S</b>		
TOOL SERIAL NO.	<b>66270465</b>						

GENERAL		GAMMA RAY				NEUTRON				
RUN NO.	DEPTHS	SPEED	T.C.	SENS.	ZERO	API G. R. UNITS	T.C.	SENS.	ZERO	API N. UNITS
NO.	FROM	FT/MIN	SEC	SETTINGS	DIV. L OR R	PER LOG DIV.	SEC	SETTINGS	DIV. L OR R	PER LOG DIV.
1	000	127	11	4	25	0	5	4	122	2000
	127	787	11	4	25	0	4	4	22	2000
<b>REPEAT SECTION (EXPANDED NEUTRON)</b>										
			11	4	25	0	5	10	506	

REMARKS **REPEAT SECTION RUN WITH 12 INCH SPACING. DIAL SET AT 100.**



# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	COMPANY	WELL	LOCATION	FIELD	PROVINCE
	FORDING COAL LIMITED	D.D.H. 402	CASTLE MOUNTAIN	FORDING RIVER	BRITISH COLUMBIA
LSD	SEC	TWP	RGE	M	
<b>312</b>					
Payment Datum	GROUND LEVEL	Elev.	K.B.		
Log Measured from	GROUND LEVEL		D.F.		
Well Depth Measured from			G.L.		
Run No.	ONE	Date	4. SEPT. 70		
First Reading	396	Last Reading	0		
Footage Logged	396	Depth Reached	397		
Depth Driller		Casing Driller			
Casing Roke					
Liquid Type	WATER	Liquid Level	92		
Min. Diam.					
Operating Time	3 HOURS	Truck No.	20		
Recorded By	PETERSON	Witnessed By	MCFARLAND		

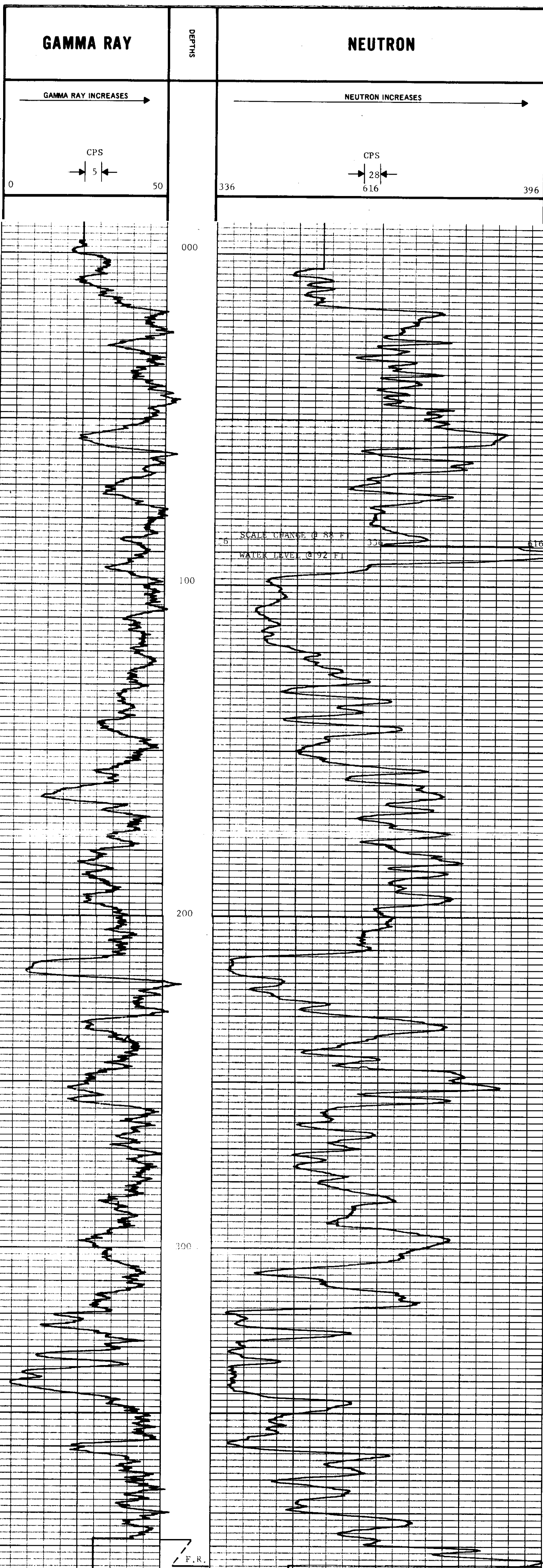
K - FRODOCK 7.13.71

EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/2	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	1 1/2
TYPE	GEIGER	DETECTOR MODEL NO.	
LENGTH	18 INCH	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	8.55 FT	LENGTH	6 INCH
GENERAL		SOURCE MODEL NO.	MRC-N-SS-W
HOIST TRUCK NO.	20	SERIAL NO.	598
INSTRUMENT TRUCK NO.		SPACING	19 INCH
TOOL SERIAL NO.	CGN27U4A65	TYPE	AmBe
		STRENGTH	6.94 x 10 <sup>6</sup> N/S

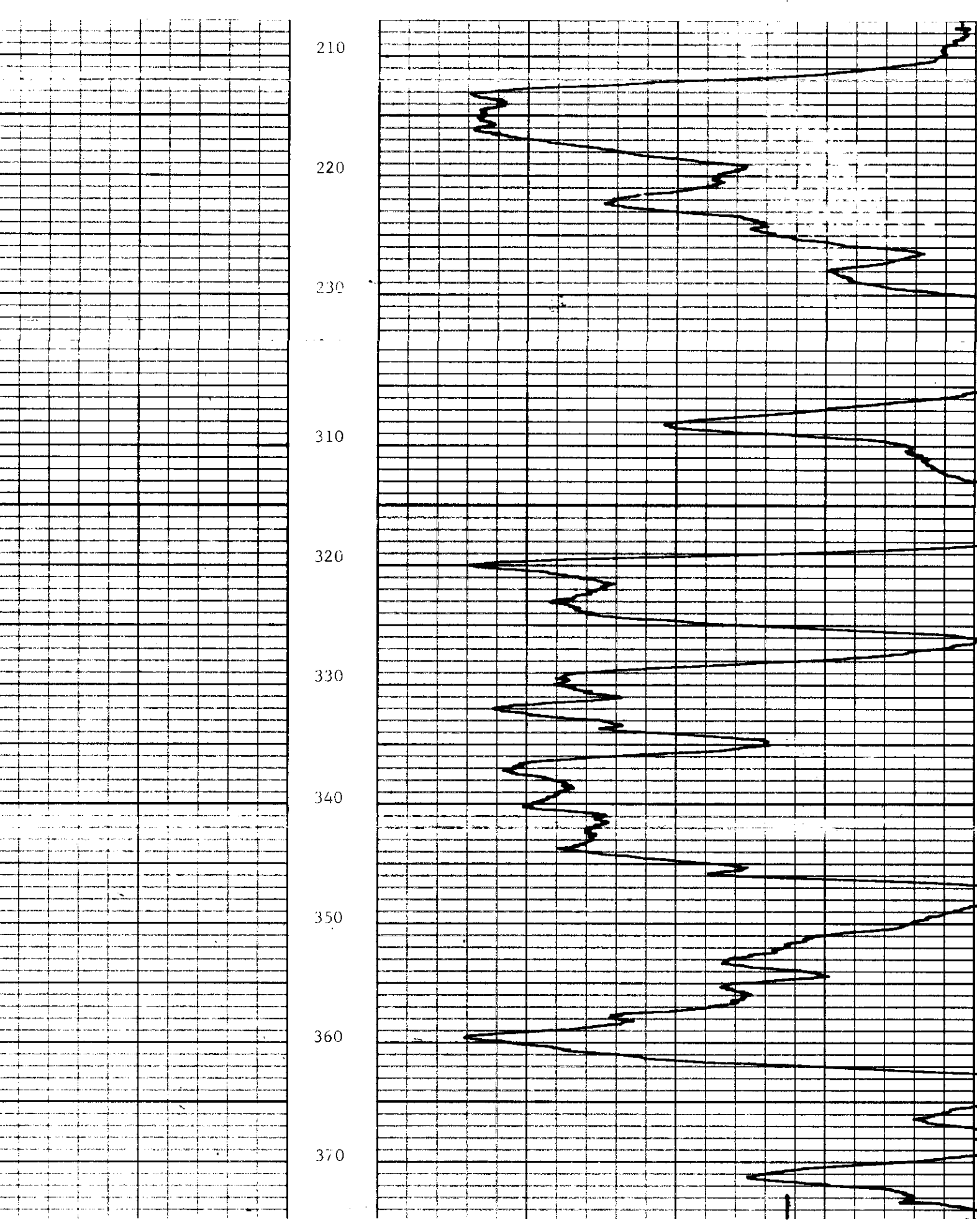
  

LOGGING DATA											
GENERAL			GAMMA RAY				NEUTRON				
RUN NO.	DEPTHS		T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.	
	FROM	TO									FT/MIN
1	0	88	11	4	25	0	5 cps	4	4	12L	28 cps
	88	396	11	4	25	0	5 cps	4	4	2L	28 cps

REMARKS  
 INTERVALS OVER COAL BEDS - 12 INCH SPACING SENS 10  
 SCALED 10 INCHES PER 100 FT



REPEAT SECTIONS - EXPANDED NEUTRON





Greenhills  
 24 500 to 24 517  
 minutes

K-Forecasts 20(3)A-1  
**GAMMA RAY NEUTRON LOG**

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO. COMPANY **BRADCO COAL LIMITED.**  
 WELL **DBH. 500**  
 LOCATION **GREENHILLS**  
 FIELD **FORDYCE RIVER.**

PROVINCE **BRITISH COLUMBIA.**  
 PERMIT NO. **GROUND LEVEL.** Fl. Above Perm. Datum  
 Log Measured from **GROUND LEVEL.** O.F.  
 Well Depths Measured from **GROUND LEVEL.** O.L.

Run No. **016**  
 Date **31 AUG 70**  
 First Reading **588**  
 Last Reading **000**  
 Footage Logged **568**  
 Depth Reached **567**  
 Depth Driller **576**  
 Casing Hole **—**  
 Casing Driller **—**  
 Fluid Type **WATER**  
 Liquid Level **103 FT.**  
 Min. Diam. **—**  
 Operating Time **3 HRS.**  
 Truck No. **20**  
 Recorded By **PETERSON** Witnessed By **PETERSON**

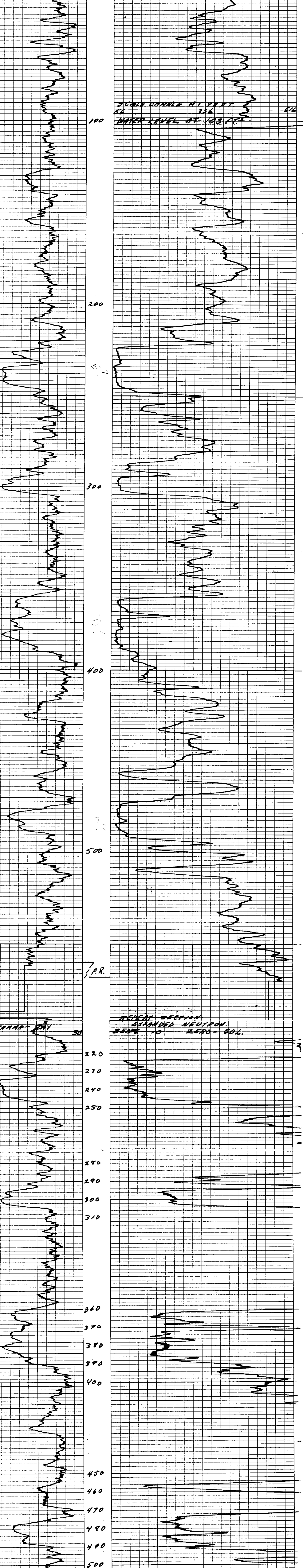
**EQUIPMENT DATA**

GAMMA RAY				NEUTRON			
RUN NO.	<b>016</b>			RUN NO.	<b>016</b>		
TOOL MODEL NO.	<b>18</b>			LOG TYPE	<b>NEUTRON/NEUTRON</b>		
DIAMETER	<b>1 1/2</b>			TOOL MODEL NO.	<b>1 1/2</b>		
DETECTOR MODEL NO.	<b>GEIGER</b>			DIAMETER	<b>1 1/2</b>		
TYPE	<b>18 INCH</b>			DETECTOR MODEL NO.	<b>PROPORTIONAL</b>		
LENGTH	<b>8.55 FT</b>			TYPE	<b>6 INCH</b>		
DISTANCE TO N. SOURCE	<b>8.55 FT</b>			LENGTH	<b>MRC-N-SS-W</b>		
GENERAL				SOURCE MODEL NO.	<b>598</b>		
HOIST TRUCK NO.	<b>20</b>			SERIAL NO.	<b>19 INCH.</b>		
INSTRUMENT TRUCK NO.	<b>—</b>			SPACING	<b>AmBe</b>		
TOOL SERIAL NO.	<b>668709765</b>			TYPE	<b>6.94 x 10<sup>6</sup> N/S</b>		
				STRENGTH			

**LOGGING DATA**

GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	DEPTHS		SPEED FT/MIN	T.C. SEC	SENS SETTINGS	ZERO DIV. L OR R	API GR UNITS PER LOG DIV.	T.C. SEC	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
	FROM	TO									
1	000	98	11	4	25	0	5 CPS	4	4	12L	28 CPS.
	98	568	4	4	25	0	5 CPS	4	4	2L	28 CPS.
<b>REPEAT SECTIONS (EXPANDED NEUTRON)</b>											
			11	4	25	0	5 CPS.	4	10	50L	

REMARKS **REPEAT SECTIONS RUN WITH 12 INCH SPACING. DIAL AT 100.**



# ROKE

GAMMA RAY NEUTRON LOG

K. FROST 20/5/51

OIL ENTERPRISES LTD. CALGARY ALBERTA

COMPANY: **MARINE COAL LIMITED.**

WELL: **DRH 501**

LOCATION: **GREENHILLS.**

FIELD: **FORBURN RIVER.**

PROVINCE: **BRITISH COLUMBIA B.C.**

Log Measured from: **GROUND LEVEL.** Elev. Perm. Datum: **D.F.**

Well Depth Measured from: **CL.**

Run No. **016**

Date **25 MAR 50**

First Reading **570**

Last Reading **570**

Footage Logged **570**

Depth Reached **571**

Depth Driller **571**

Casing Note

Fluid Type **WATER**

Liquid Level **92 FT.**

Min. Datum

Operating Time **3 AM.**

Truck No. **30**

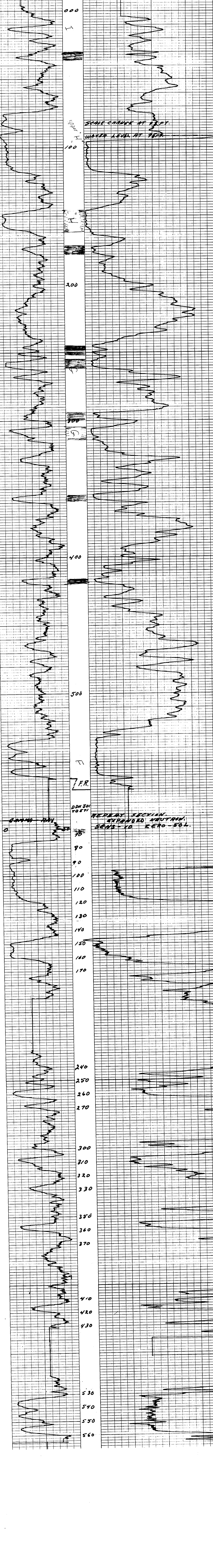
Recorded by **PETERSON**

Witnessed by **PETERSON**

GAMMA RAY				NEUTRON			
T.OOL MODEL NO	<b>11</b>	T.OOL TYPE	<b>GEIGER</b>	T.OOL MODEL NO	<b>11</b>	T.OOL TYPE	<b>PROPORTIONAL</b>
DIAMETER	<b>1 1/2</b>	DIAMETER	<b>1 1/2</b>	DIAMETER	<b>1 1/2</b>	DIAMETER	<b>1 1/2</b>
LENGTH	<b>18 INCH</b>	LENGTH	<b>6 INCH</b>	LENGTH	<b>6 INCH</b>	LENGTH	<b>6 INCH</b>
DISTANCE TO N. SOURCE	<b>8.55 FT</b>	SOURCE MODEL NO	<b>MRC-N-SS-W</b>	SOURCE MODEL NO	<b>MRC-N-SS-W</b>	SOURCE MODEL NO	<b>MRC-N-SS-W</b>
HOIST TRUCK NO	<b>20</b>	SERIAL NO	<b>598</b>	SERIAL NO	<b>598</b>	SERIAL NO	<b>598</b>
INSTRUMENT TRUCK NO		SPACING	<b>18 INCH.</b>	SPACING	<b>18 INCH.</b>	SPACING	<b>18 INCH.</b>
T.OOL SERIAL NO	<b>CGN2709A65</b>	STRENGTH	<b>AmBe</b>	STRENGTH	<b>AmBe</b>	STRENGTH	<b>AmBe</b>
			<b>6.94 x 10<sup>8</sup> N/S</b>		<b>6.94 x 10<sup>8</sup> N/S</b>		<b>6.94 x 10<sup>8</sup> N/S</b>

LOGGING DATA											
GENERAL				GAMMA RAY				NEUTRON			
RUN NO	DEPTHS FROM	TO	SPEED FT/MIN	T C SEC	SENS SETTINGS	ZERO DIV L OR R	API GR UNITS PER LOG DIV	T C SEC	SENS SETTINGS	ZERO DIV L OR R	API N. UNITS PER LOG DIV
1	000	92	11	4	25	0	5 CPS	4	4	12L	28 CPS.
	92	570	4	4	25	0	5 CPS	4	4	2L	28 CPS.
<b>REPEAT SECTIONS (EXPANDED NEUTRON)</b>											
			11	4	25	0	5 CPS.	4	10	SOL	

REMARKS: **REPEAT SECTIONS RUN WITH 12 INCH SPACING. DIAL AT 160.**



# ROKE

GAMMA RAY NEUTRON LOG

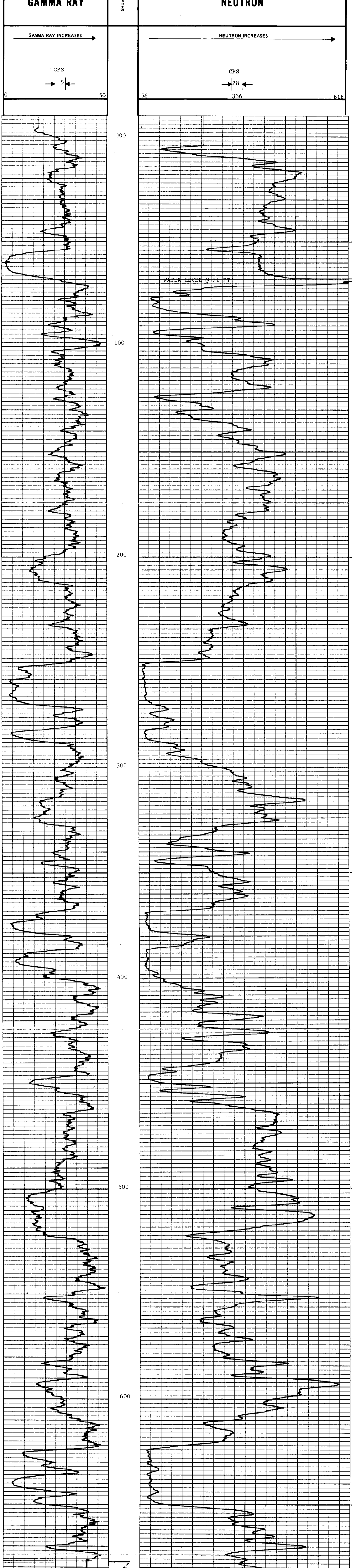
OIL ENTERPRISES LTD. CALGARY, ALBERTA

K-Records 70131A-1

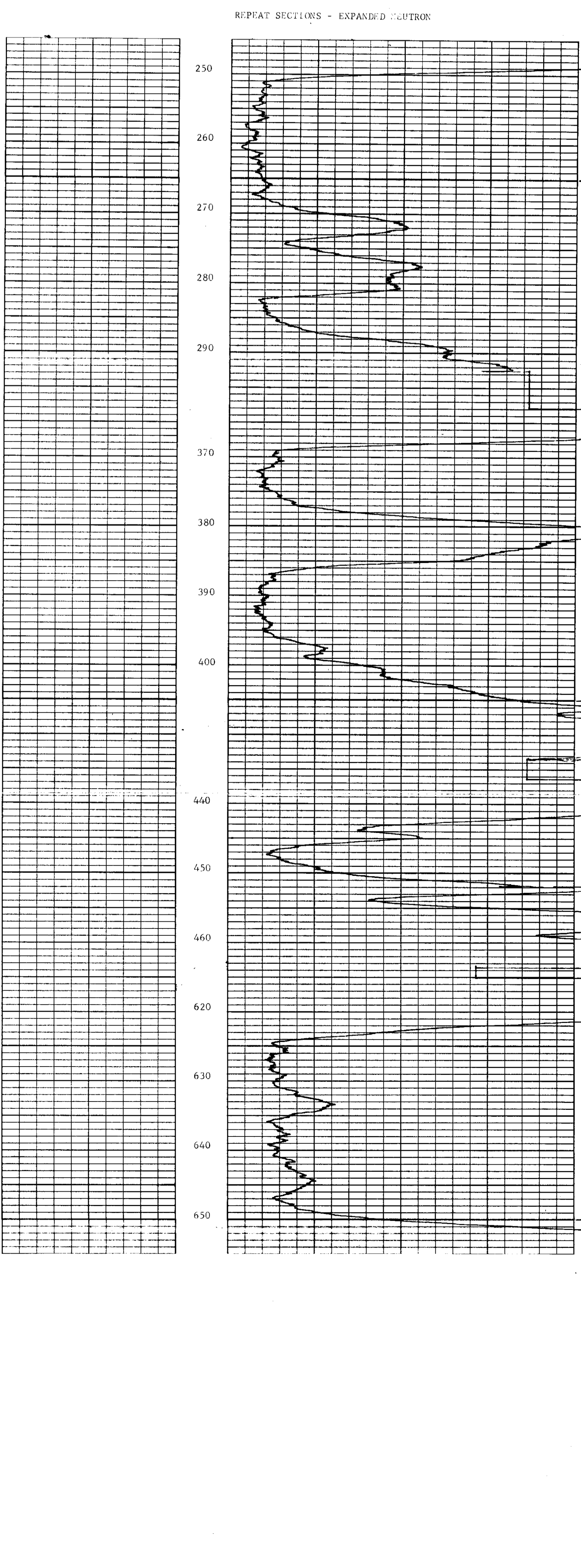
FILE NO.	COMPANY	FORDING COAL LIMITED
LSD SEC	WELL	DDH 502
TYPE	LOCATION	GEBRHEILLS
RGE	RGE	
W	FIELD	FORDING RIVER
M	PROVINCE	BARTTISH COLUMBIA
Permanent Datum	GROUND LEVEL	Elev. _____
Log Measured from	GROUND LEVEL	Ft. Above Perm. Datum _____
Well Depth Measured from	GROUND LEVEL	G.L. _____
Run No.	ONE	
Date	12 SEPT 70	
First Reading	685	
Last Reading	0	
Footage Logged	685	
Depth Reached	686	
Depth Driller	691	
Casing Driller		
Fluid Type	WATER	
Liquid Level	71	
Min. Diam.		
Operating Time	4 HOURS	
Tick No.	20	
Recorded By	PHINSON	Witnessed By
		TAPLIN

EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/2	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	1 1/2
TYPE	GEIGER	DETECTOR MODEL NO.	
LENGTH	18 INCH	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	8.55 FT	LENGTH	6 INCH
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	598
HOIST TRUCK NO.	20	SPACING	19 INCH
INSTRUMENT TRUCK NO.		TYPE	AmBe
TOOL SERIAL NO.	CCN2714A65	STRENGTH	6.94 x 10 <sup>6</sup> N/S

LOGGING DATA											
GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	FROM	TO	SPEED FT/MIN	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	000	685	11	4	25	0	5 CPS	4	4	2L	28 CPS



REPEAT SECTIONS - EXPANDED NEUTRON



# ROKE

OIL ENTERPRISES LTD., CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

K-LOGS-26(3)A-1

FILE NO. \_\_\_\_\_

COMPANY **PROVINCIAL COAL LIMITED.**

WELL **DOH 503**

LOCATION **GREENHILLS.**

FIELD **CORNING RIVER.**

PROVINCE **BRITISH COLUMBIA.**

Permanent Datum **GROUND LEVEL.** Elev. \_\_\_\_\_

Log Measured from **GROUND LEVEL.** Ft. Above Perm. Datum \_\_\_\_\_

Well Depths Measured from \_\_\_\_\_

Run No. **ONE**

Date \_\_\_\_\_

First Reading **604**

Last Reading **604**

Loggage Logged **604**

Depth Reached **604**

Depth Driller \_\_\_\_\_

Casing Driller \_\_\_\_\_

Liquid Type **WATER**

Liquid Level **28 FT.**

Mfr. Diam. \_\_\_\_\_

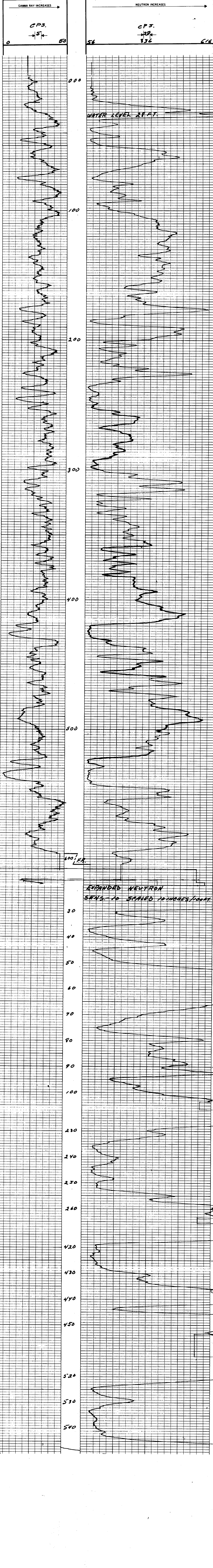
Operating Time **4 HRS.**

Truck No. **20**

Recorded By **PETERSON** Witnessed By **NEWMAN.**

EQUIPMENT DATA				LOGGING DATA			
GAMMA RAY		NEUTRON		GAMMA RAY		NEUTRON	
RUN NO.	<b>ONE</b>	RUN NO.	<b>ONE</b>	GENERAL		GENERAL	
TOOL MODEL NO.		LOG TYPE	<b>NEUTRON/NEUTRON</b>	DEPTHS	FROM	TO	
DIAMETER	<b>1 1/8</b>	TOOL MODEL NO.		SPEED			
DETECTOR MODEL NO.		DIAMETER	<b>1 1/8</b>	FT./MIN.			
TYPE	<b>GEIGER</b>	DETECTOR MODEL NO.		T.C. SEC.			
LENGTH	<b>18 INCH</b>	TYPE	<b>PROPORTIONAL</b>	SENS. SETTINGS			
DISTANCE TO N. SOURCE	<b>8.55 FT</b>	LENGTH	<b>6 INCH</b>	ZERO DIV. L OR R			
GENERAL				API GR. UNITS PER LOG DIV.			
HOIST TRUCK NO.	<b># 20</b>	SOURCE MODEL NO.	<b>MRC-N-SS-W</b>	T.C. SEC.			
INSTRUMENT TRUCK NO.		SERIAL NO.	<b>578</b>	SENS. SETTINGS			
TOOL SERIAL NO.	<b>CGN270465</b>	SPACING	<b>12 INCH.</b>	ZERO DIV. L OR R			
				TYPE			
				STRENGTH			
				API N. UNITS PER LOG DIV.			

REMARKS  
**INTERVALS OVER COAL BEDS - 12 INCH SPACING. SENS-10. SCALED 10 INCHES PER 100 FT.**



K-Forms 20(3)-1

# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	COMPANY	FORGING COAL LIMITED
LSD	WELL	DJH 504
SEC	LOCATION	GREENHILLS
TWP	RGE	FORGING RIVER
M	FIELD	FORGING RIVER
M	PROVINCE	BRITISH COLUMBIA
Permanent Datum	GROUND LEVEL	Elv. _____
Log Measured from	GROUND LEVEL	Fl. Above Perm. Datum _____
Well Depths Measured from	_____	K.B. _____
		D.F. _____
		G.L. _____
Run No.	ONE	
Date	13 SEPT 70	
First Reading	538	
Last Reading	0	
Footage Logged	538	
Depth Reached	539	
Depth Driller	562	
Casing Driller		
Casing Role		
Fluid Type	WATER	
Liquid Level	102	
Min. Diam.		
Operating Time	3 HOURS	
Truck No.	20	
Recorded By	PETERSON	Witnessed By
		TAPLIN

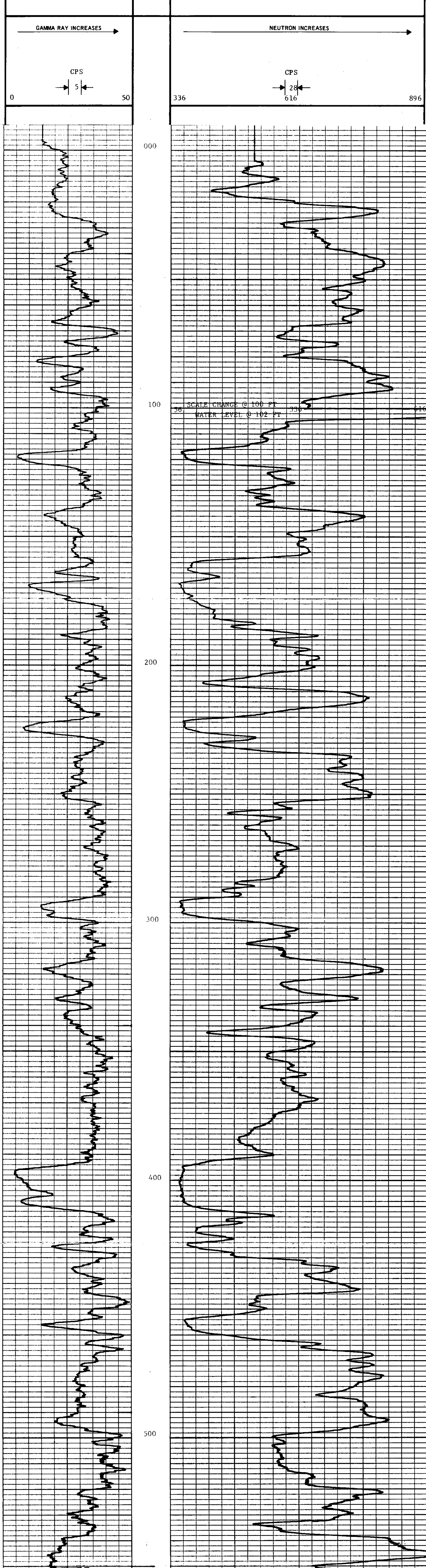
312

EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/2	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	1 1/2
TYPE	GEIGER	DETECTOR MODEL NO.	
LENGTH	18 INCH	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	8.55 FT	LENGTH	6 INCH
		SOURCE MODEL NO.	MRC-N-SS-W
		SERIAL NO.	598
HOIST TRUCK NO.	20	SPACING	19 INCH
INSTRUMENT TRUCK NO.		TYPE	AmBe
TOOL SERIAL NO.	CGN2714A65	STRENGTH	6.94 x 10 <sup>6</sup> N/S

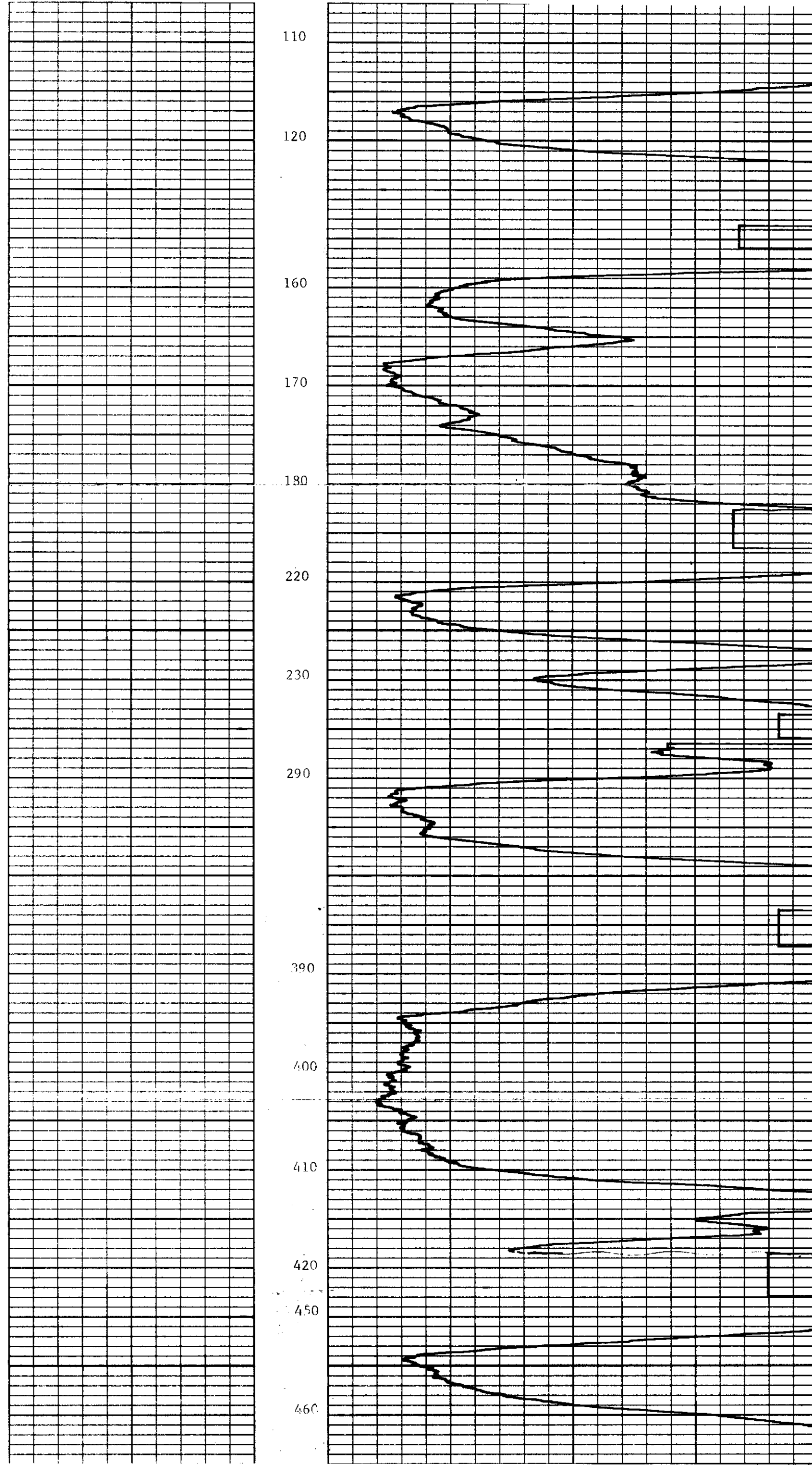
  

LOGGING DATA											
GENERAL				GAMMA RAY			NEUTRON				
RUN NO.	DEPTHS FROM	TO	SPEED FT/MIN	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	000	100	11	4	25	0	5 CPS	4	4	12L	28 CPS
	100	558	11	4	25	0	5 CPS	4	4	2L	28 CPS

REMARKS



REPEAT SECTIONS - EXPANDED NEUTRON



# ROKE

GAMMA RAY NEUTRON LOG

K-Formation 7063A-1

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	COMPANY	FORGING COAL LIMITED
LSD	WELL	RH 505
SEC	TWP	GREENHILLS
RGE	LOCATION	FORGING RIVER
W	FIELD	FORGING RIVER
M	PROVINCE	BRITISH COLUMBIA
Permanent Datum	GROUND LEVEL	Elev. 52,274
Log Measured from	GROUND LEVEL	Ft. Above Perm. Datum
Well Depths Measured from		H. B. D. F. G.L.
Run No.	ONE	
Date	24 NOV 70	
First Reading	496	
Last Reading	0	
Footage Logged	496	
Depth Reached	497	
Depth Driller	500	
Casing Role		
Casing Driller		
Fluid Type	AIR/WATER	
Liquid Level	101	
Min. Diam.		
Operating Time	2 HOURS	
Truck No.	10	
Recorded By	HANKS	Witnessed By
		TAPLIN

312

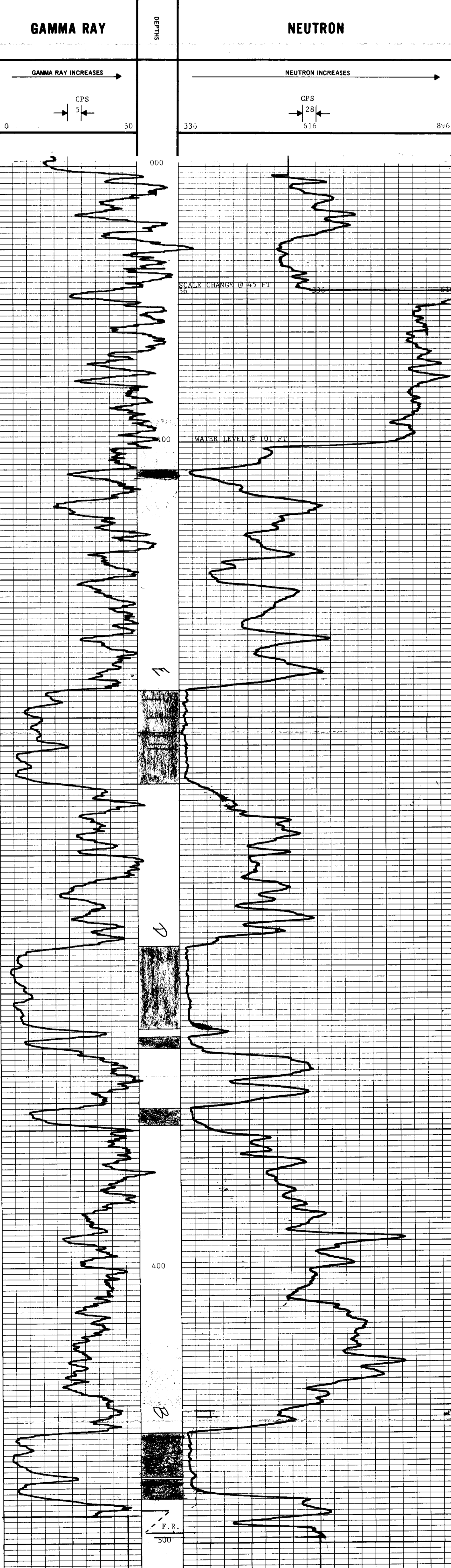
### EQUIPMENT DATA

GAMMA RAY				NEUTRON			
RUN NO.	ONE			RUN NO.	ONE		
TOOL MODEL NO.	1 1/2			LOG TYPE	NEUTRON/NEUTRON		
DIAMETER	1 1/2			TOOL MODEL NO.	1 1/2		
DETECTOR MODEL NO.	GEIGER			DIAMETER	1 1/2		
TYPE	18 INCH			DETECTOR MODEL NO.	PROPORTIONAL		
LENGTH	8.55 FT			TYPE	6 INCH		
DISTANCE TO N. SOURCE				LENGTH	MRC-N-SS-W		
GENERAL				SOURCE MODEL NO.	606		
HOIST TRUCK NO	10			SERIAL NO.	19 INCH		
INSTRUMENT TRUCK NO.	CGN27U4A78			SPACING	AmBe		
TOOL SERIAL NO.				TYPE	700 x 10 <sup>6</sup> N/S		
				STRENGTH			

### LOGGING DATA

RUN NO.	DEPTHS		SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	GAMMA RAY		NEUTRON		API N. UNITS PER LOG DIV.	
	FROM	TO				ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS		ZERO DIV. L OR R
1	0	45	11	3	25	OL	5 CPS	3	4.2	12L	28 CPS
	45	496	11	3	25	OL	5 CPS	3	4.2	2L	28 CPS

REMARKS



K-FOCUS-16101-1

# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD., CALGARY, ALBERTA

FILE NO. COMPANY RECORDING CODE LIMITED

WELL R.H. 505

LOCATION GREEN HILLS

FIELD FORDING RIVER

## 312

PROVINCE BRITISH COLUMBIA

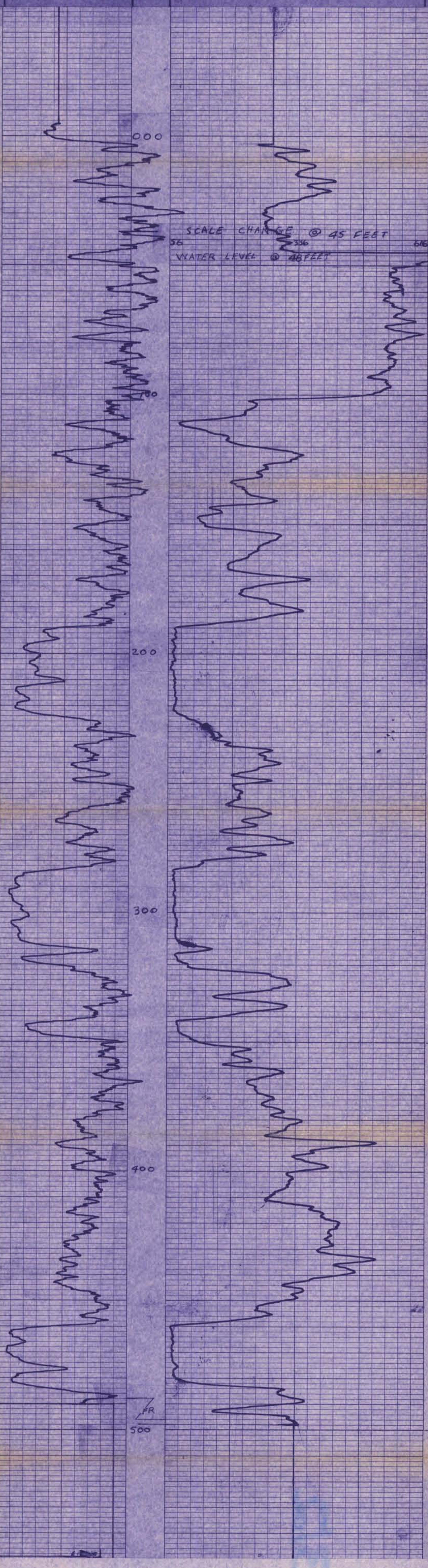
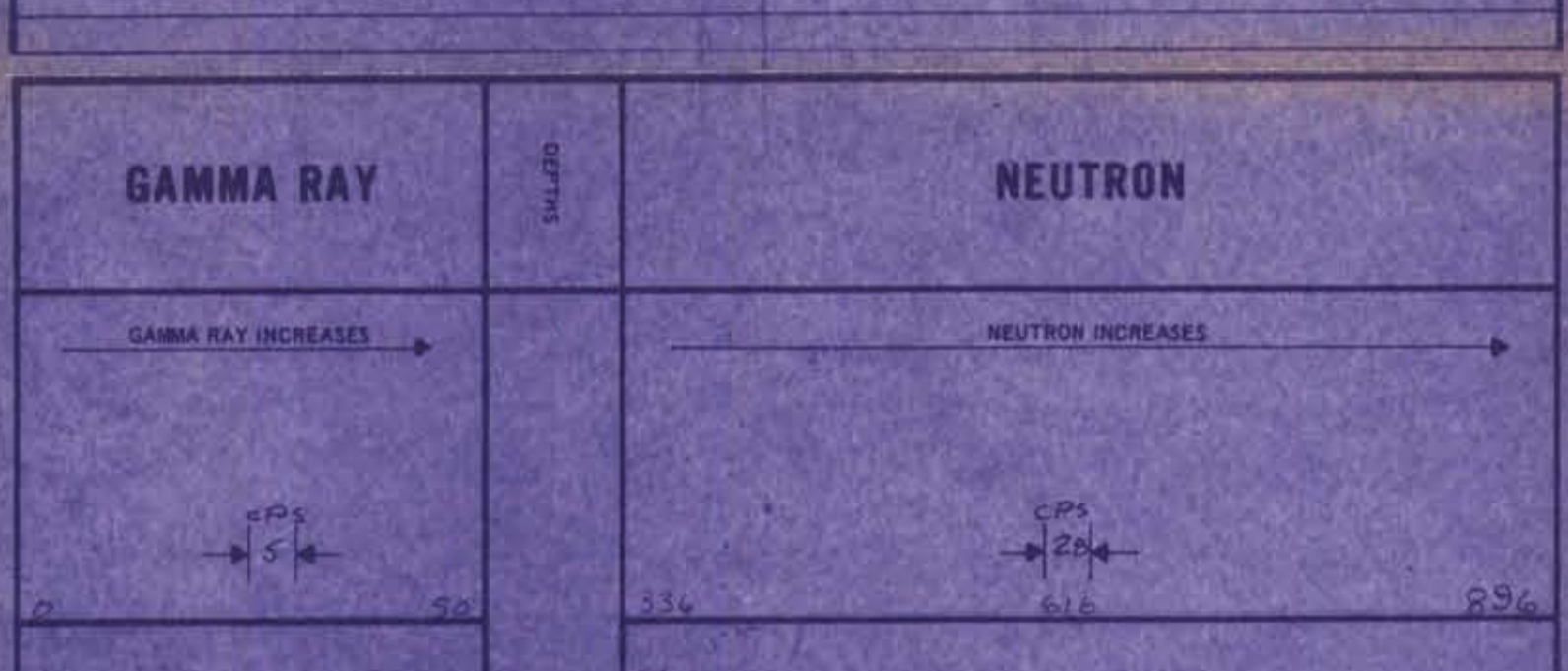
Permit No. SR01112 LEVEL LEVEL Elev. 01  
 Last Measured from SR01112 LEVEL LEVEL Elev. 01  
 Units Measured from 01

Run No.	ONE
Date	24 NOV 70
First Reading	486
Last Reading	606
Footage Logged	486
Depth Reached	487
Casing Depth	100
Casing Diameter	
Fluid Type	AIR / WATER
Initial Level	48
Min. Diam.	
Operating Time	2 HRS
Truck No.	10
Recorded By	BADKS
Witnessed By	TAPLIN

EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/2	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	1 1/2
TYPE	GEIGER	DETECTOR MODEL NO.	
LENGTH	18 INCH	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	8.85 FT	LENGTH	6 INCH
		SOURCE MODEL NO.	MRC-N-SS-W
		SERIAL NO.	606
HOIST TRUCK NO.	10	SPACING	19 INCH
INSTRUMENT TRUCK NO.		TYPE	AmBe
TOOL SERIAL NO.	C6N2742A78	STRENGTH	1.00x10 <sup>4</sup> N/S

LOGGING DATA										
GENERAL			GAMMA RAY				NEUTRON			
RUN NO.	DEPTHS	SPEED	T.C.	SENS.	ZERO	API N. UNITS	T.C.	SENS.	ZERO	API N. UNITS
	FROM TO	FT/MIN	SEC	SETTINGS	DIV. L OR R	PER LOG DIV.	SEC	SETTINGS	DIV. L OR R	PER LOG DIV.
ONE	000 45	11	3	25	06	5 CPS	3	42	12L	28 CPS
	45 486	11	3	25	06	5 CPS	3	42	2L	28 CPS



# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

K-Fordink 7013A-1

FILE NO. \_\_\_\_\_  
 COMPANY FORDING COAL LIMITED  
 WELL RH 506  
 LOCATION GREEN HILLS  
 FIELD FORDING RIVER  
**312**

PROVINCE BRITISH COLUMBIA

Permanent Datum GROUND LEVEL ELEV. 5811.5 K.B. \_\_\_\_\_  
 Log Measured from GROUND LEVEL FT. Above Perm. Datum D.F. \_\_\_\_\_  
 Well Depths Measured from \_\_\_\_\_ G.L. \_\_\_\_\_

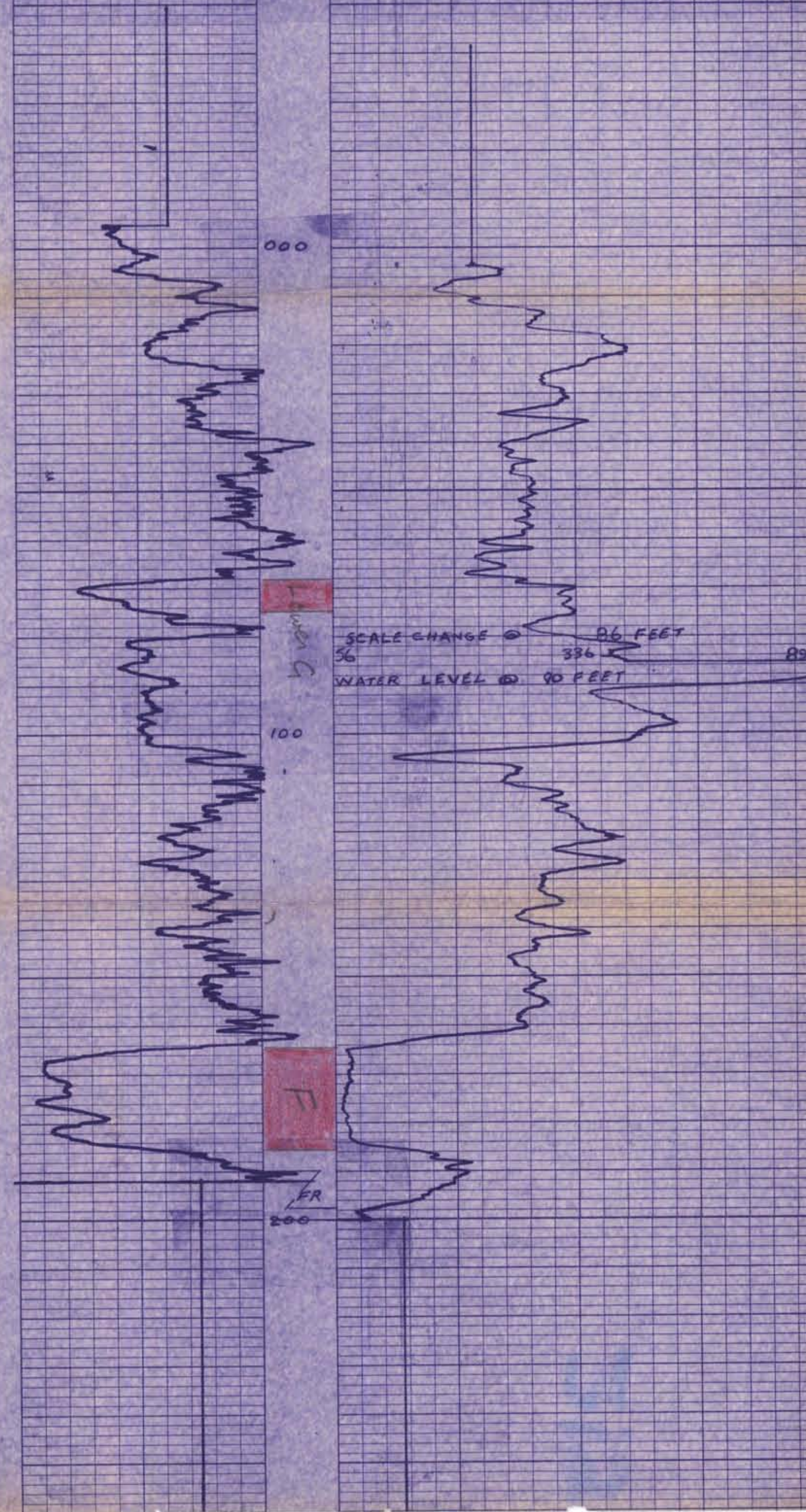
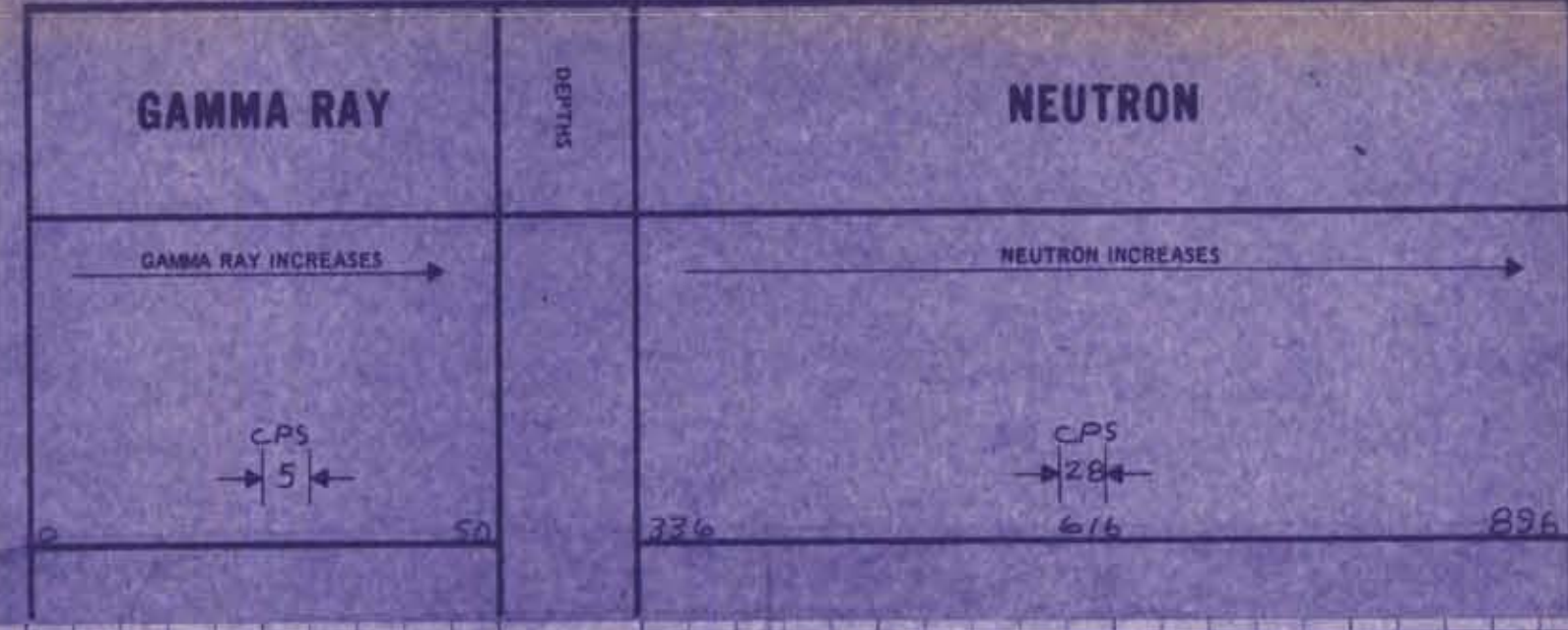
Run No. ONE  
 Date 29 NOV 70  
 First Reading 198  
 Last Reading 000  
 Footage Logged 198  
 Depth Reached 199  
 Depth Driller 215  
 Casing Rock \_\_\_\_\_  
 Casing Driller \_\_\_\_\_  
 Fluid Type AIR / WATER  
 Liquid Level \_\_\_\_\_  
 Mth. Diam \_\_\_\_\_  
 Operating Time 2 HRS  
 Truck No. 10  
 Recorded By LARKIN Witnessed By PEARSON

EQUIPMENT DATA					
GAMMA RAY			NEUTRON		
RUN NO.	<u>ONE</u>			RUN NO.	<u>ONE</u>
TOOL MODEL NO.				LOG TYPE	<u>NEUTRON/NEUTRON</u>
DIAMETER	<u>1 1/2</u>			TOOL MODEL NO.	
DETECTOR MODEL NO.				DIAMETER	<u>1 1/2</u>
TYPE	<u>GEIGER</u>			DETECTOR MODEL NO.	
LENGTH	<u>18 INCH</u>			TYPE	<u>PROPORTIONAL</u>
DISTANCE TO N. SOURCE	<u>8.55 FT</u>			LENGTH	<u>6 INCH</u>
GENERAL			SOURCE MODEL NO.	<u>MRC-N-SS-W</u>	
HOIST TRUCK NO.	<u>10</u>			SERIAL NO.	<u>606</u>
INSTRUMENT TRUCK NO.				SPACING	<u>19 INCH</u>
TOOL SERIAL NO.	<u>C6N2709A78</u>			TYPE	<u>AmBe</u>
			STRENGTH	<u>7.00 x 10<sup>6</sup> N/S</u>	

LOGGING DATA											
RUN NO.	GENERAL		SPEED FT/MIN	T.C. SEC	SENS SETTINGS	GAMMA RAY		T.C. SEC	SENS SETTINGS	NEUTRON	
	FROM	TO				ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.			ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
<u>ONE</u>	<u>000</u>	<u>86</u>	<u>11</u>	<u>3</u>	<u>25</u>	<u>0L</u>	<u>5 CPS</u>	<u>3</u>	<u>4.2</u>	<u>12L</u>	<u>28 CPS</u>
	<u>86</u>	<u>198</u>	<u>11</u>	<u>3</u>	<u>25</u>	<u>0L</u>	<u>5 CPS</u>	<u>3</u>	<u>4.2</u>	<u>2L</u>	<u>28 CPS</u>

REMARKS \_\_\_\_\_





# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO. COMPANY **FORDING COAL LIMITED**

WELL **RH 507**

LOCATION **GREENHILLS**

FIELD **FORDING RIVER**

PROVINCE **BRITISH COLUMBIA**

Permanent Datum **GROUND LEVEL** Elev. **6172.2**

Log Measured from **GROUND LEVEL** ft. Above Perm. Datum

Well Depth Measured from

Run No. **ONE**

Date **24 NOV 70**

First Reading **548**

Last Reading **000**

Footage Logged **548**

Depth Reached **548**

Depth Driller **550**

Casing Footage

Casing Driller

Fluid Type **AIR - WATER**

API No.

Operating Time **2 HRS.**

Truck No. **10**

Recorded By **BANKS** Witnessed By **PEARSON**

K - Forecasts (7013)A-1

**312**

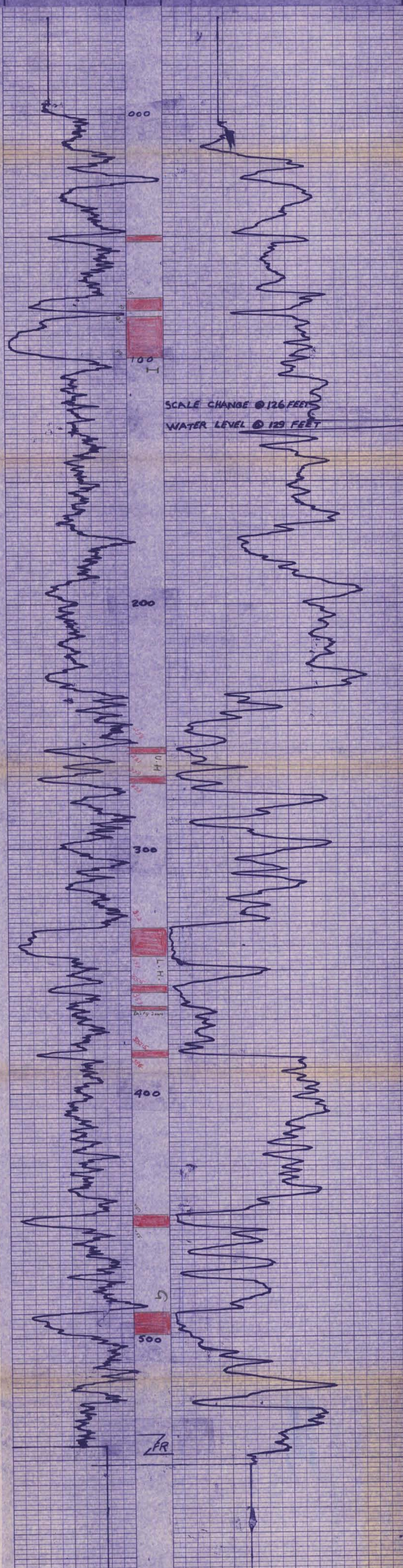
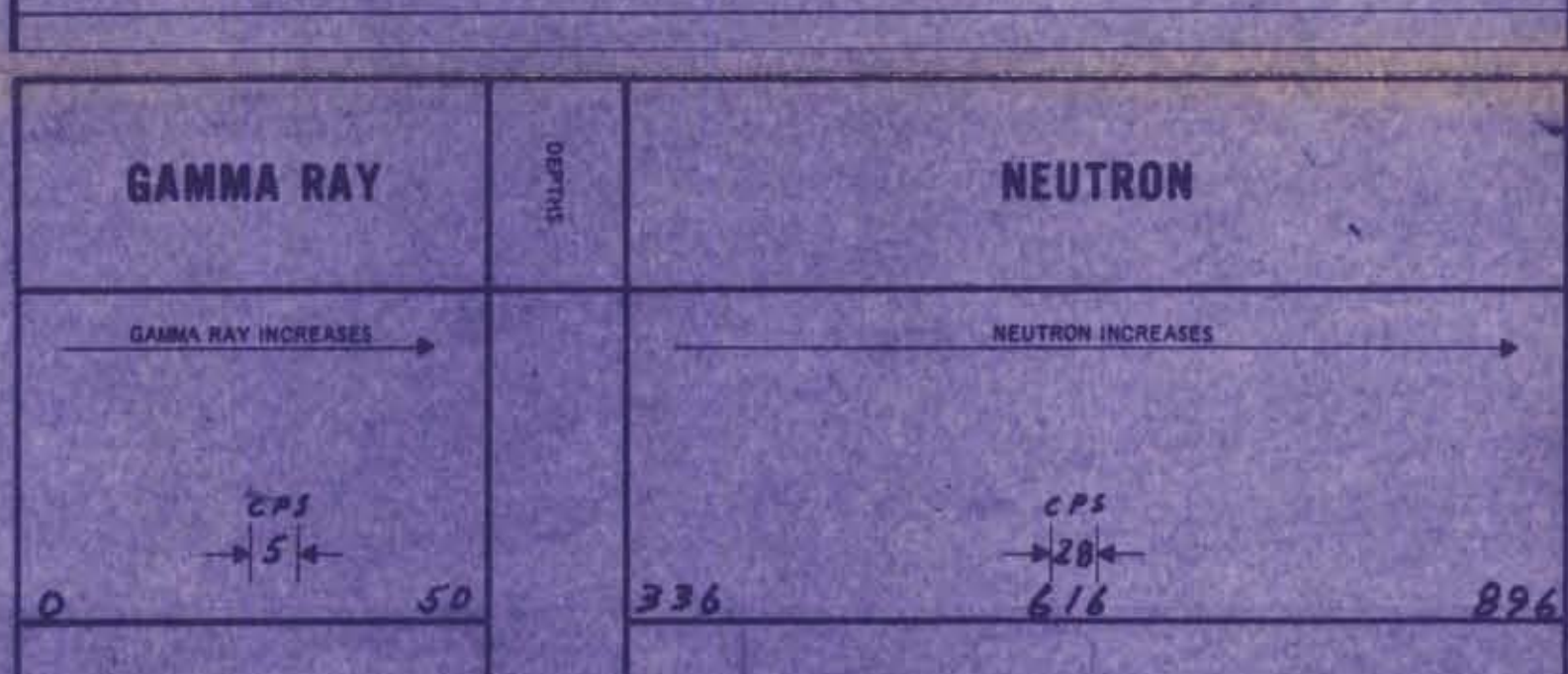
### EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/2	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	1 1/2
TYPE	GEIGER	DETECTOR MODEL NO.	
LENGTH	18 INCH	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	8.53 FT	LENGTH	6 INCH
		SOURCE MODEL NO.	MRC-N-SS-W
		SERIAL NO.	606
HOIST TRUCK NO.	10	SPACING	12 INCH
INSTRUMENT TRUCK NO.		TYPE	AmBe
TOOL SERIAL NO.	CGN27UAA7B	STRENGTH	7.00 x 10 <sup>6</sup> N/S

### LOGGING DATA

RUN NO.	GENERAL		GAMMA RAY				NEUTRON				
	FROM	TO	SPEED FT/Min	T.C. SEC	SENS SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
ONE	000	129	11	3	25	DL	5 CPS	3	4.2	12 L	28 CPS
	129	548	11	3	25	DL	5 CPS	3	4.2	2 L	28 CPS

REMARKS



# ROKE

GAMMA RAY NEUTRON LOG

K-Second 7613/84

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO. COMPANY FORDING COAL LIMITED

WELL RH 508

LOCATION GREENHILLS

RGE FORDING RIVER

W. M FIELD

PROVINCE BRITISH COLUMBIA

Permanent Datum GROUND LEVEL Elev. \_\_\_\_\_

Log Measured from GROUND LEVEL Ft. Above Perm. Datum \_\_\_\_\_

Well Depth Measured from \_\_\_\_\_

Run No. ONE

Date 8 OCT 70

First Reading 591

Last Reading 0

Footage Logged 591

Depth Reached 592

Depth Driller \_\_\_\_\_

Casing Driller \_\_\_\_\_

Fluid Type WATER

Liquid Level 136

Min. Diam. \_\_\_\_\_

Operating Time 3 HOURS

Truck No. 20

Recorded By PETERSON

Witnessed By PEARSON

# 312

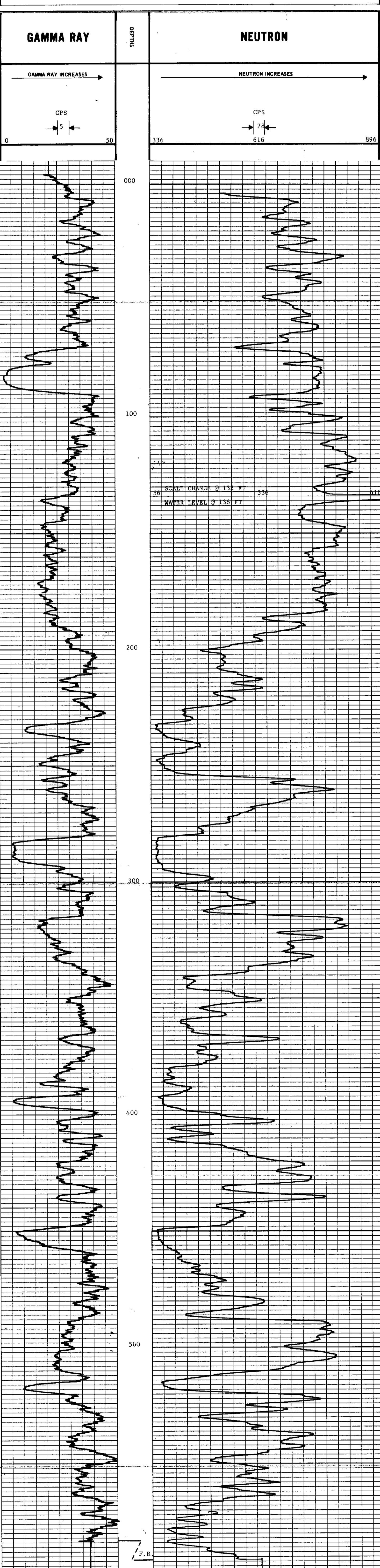
### EQUIPMENT DATA

GAMMA RAY				NEUTRON			
RUN NO.	ONE			RUN NO.	ONE		
TOOL MODEL NO.	1 1/2			LOG TYPE	NEUTRON/NEUTRON		
DIAMETER	1 1/2			TOOL MODEL NO.	1 1/2		
DETECTOR MODEL NO.	GEIGER			DIAMETER	1 1/2		
TYPE	18 INCH			DETECTOR MODEL NO.	PROPORTIONAL		
LENGTH	8.55 FT			LENGTH	6 INCH		
DISTANCE TO N. SOURCE				SOURCE MODEL NO.	MRC-N-SS-W		
GENERAL				SERIAL NO.	598		
HOIST TRUCK NO.	20			SPACING	19 INCH		
INSTRUMENT TRUCK NO.				TYPE	AmBe		
TOOL SERIAL NO.	CGN27U4A65			STRENGTH	6.94 x 10 <sup>6</sup> N/S		

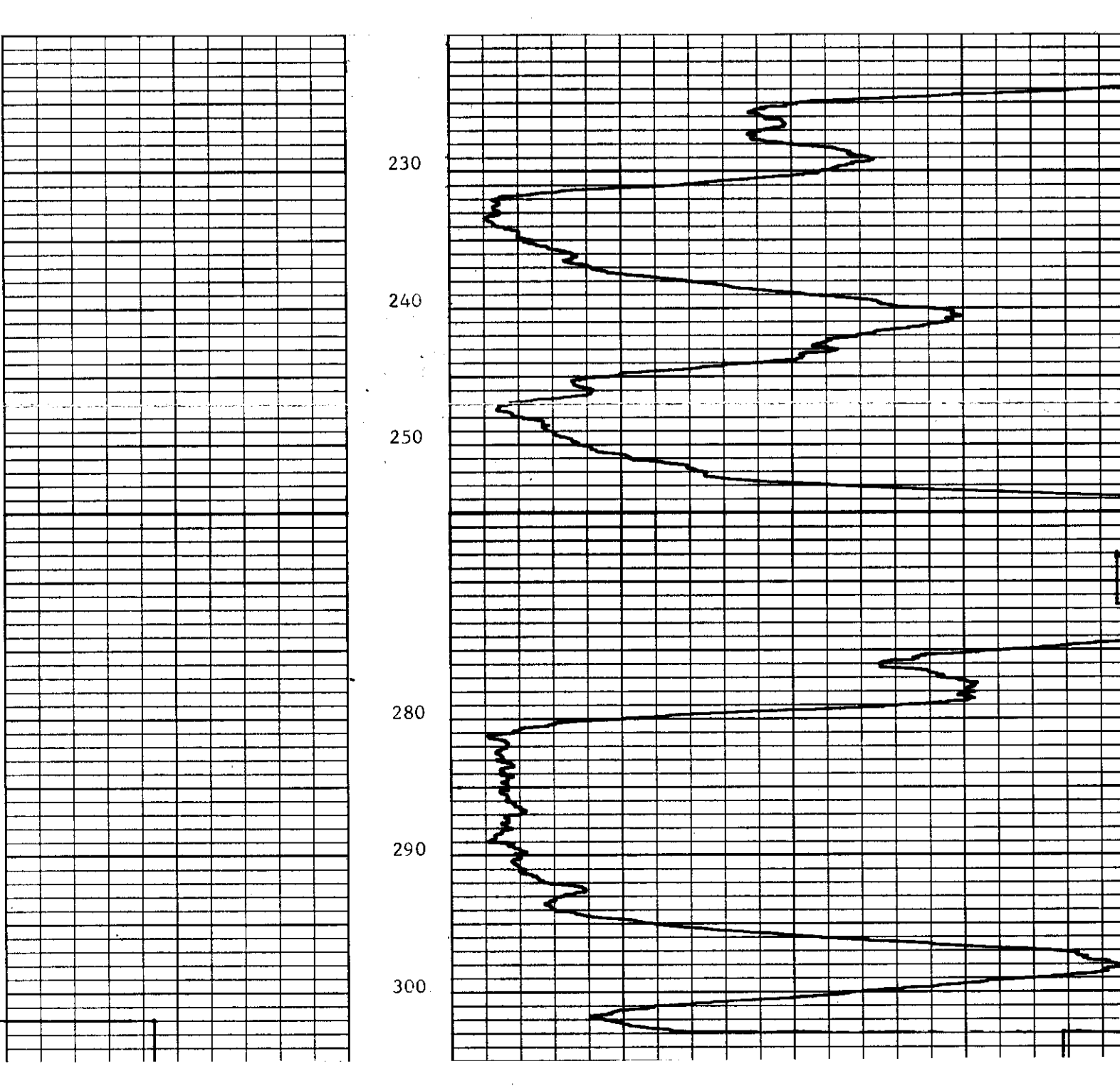
### LOGGING DATA

RUN NO.	DEPTHS		SPEED FT/MIN	T.C. SEC.	GAMMA RAY			NEUTRON			
	FROM	TO			ZERO DIV. L OR R	API G. R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.	
1	0	133	11	4	25	0	5 CPS	4	4	12L	28 CPS
	133	591	11	4	25	0	5 CPS	4	4	2L	28 CPS

REMARKS



### EXPANDED NEUTRON



K-Forming 70(3)A-1

# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO. COMPANY **PARSONS CORP. LIMITED**

WELL **RH 509**

LOCATION **GREENHILLS**

FIELD **FORBIE RIVER**

PROVINCE **BRITISH COLUMBIA**

## 312

Permanent Datum **GROUND LEVEL** Elev. \_\_\_\_\_

Log Measured from **GROUND LEVEL** Ft. Above Perm. Datum \_\_\_\_\_

Well Depths Measured from \_\_\_\_\_ O.L. \_\_\_\_\_

Run No. **ONE**

Date **18 OCT 70**

First Reading **234**

Last Reading **000**

Footage Logged **234**

Depth Reached **235**

Depth Driller \_\_\_\_\_

Casing Driller \_\_\_\_\_

Casing Roke \_\_\_\_\_

Fluid Type **WATER**

Liquid Level **37 FT.**

Main Diam. \_\_\_\_\_

Operating Time **2 HRS.**

Truck Nos. **20**

Recorded By **MATERSOY**

Witnessed By **PEARSON**

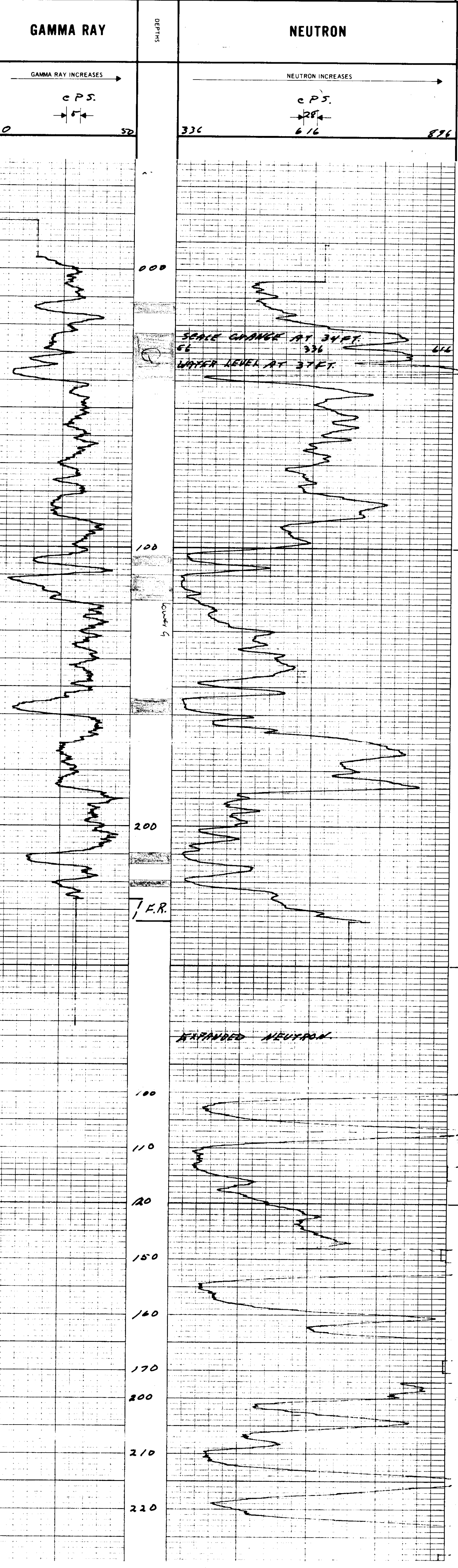
### EQUIPMENT DATA

GAMMA RAY				NEUTRON			
RUN NO.	<b>ONE</b>			RUN NO.	<b>ONE</b>		
TOOL MODEL NO.				LOG TYPE	<b>NEUTRON/NEUTRON</b>		
DIAMETER	<b>1 1/2</b>			TOOL MODEL NO.			
DETECTOR MODEL NO.				DIAMETER	<b>1 1/2</b>		
TYPE	<b>GEIGER</b>			DETECTOR MODEL NO.			
LENGTH	<b>18 INCH</b>			TYPE	<b>PROPORTIONAL</b>		
DISTANCE TO N. SOURCE	<b>8.55 FT</b>			LENGTH	<b>6 INCH</b>		
GENERAL				SOURCE MODEL NO.	<b>MRC-N-SS-W</b>		
HOIST TRUCK NO.	<b>7020</b>			SERIAL NO.	<b>598</b>		
INSTRUMENT TRUCK NO.				SPACING	<b>1 INCH</b>		
TOOL SERIAL NO.	<b>66N2704965</b>			TYPE	<b>AmBe</b>		
				STRENGTH	<b>6.94 x 10<sup>6</sup> N/S</b>		

### LOGGING DATA

RUN NO.	DEPTHS		SPEED FT/MIN	T C SEC	GAMMA RAY			NEUTRON			
	FROM	TO			SENS SETTINGS	ZERO DIV L OR R	API GR UNITS PER LOG DIV	T C SEC	SENS SETTINGS	ZERO DIV L OR R	API N UNITS PER LOG DIV
1	000	34	11	4	25	0	5 CPS	4	4	22	28 CPS
	34	234	11	4	25	0	5 CPS	4	4	26	28 CPS

REMARKS



# ROKE

GAMMA RAY NEUTRON LOG

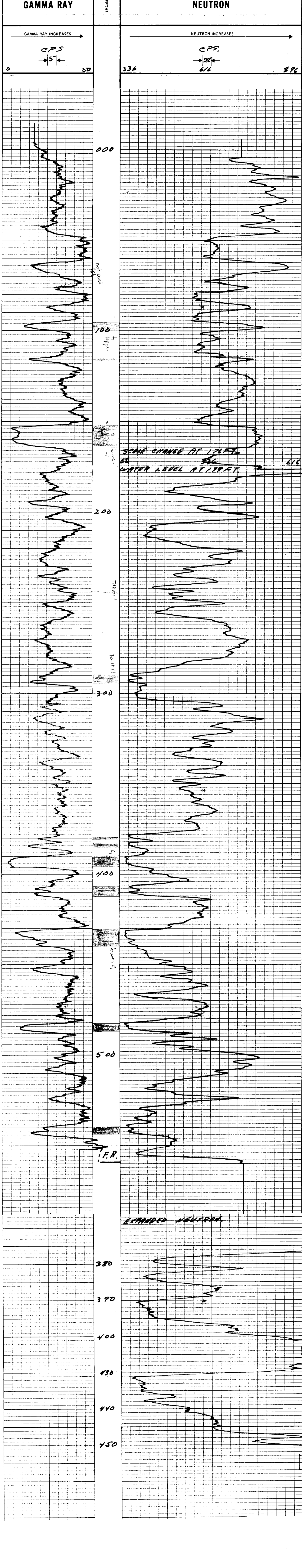
OIL ENTERPRISES LTD. CALGARY, ALBERTA

K. Forsythe 7/2/51

FILE NO.	COMPANY	WELL	LOCATION	FIELD	<b>312</b>
SEC	FORDON COAL LIMITED	RH. 510.	GREENHILLS	EARDINE RIVER	
TYPE					
ROF					
M					
PROVINCE BRITISH COLUMBIA.					
Permanent Datum: <u>STOARD LEVEL.</u> Elev. _____ K.B. _____					
Log Measured from: <u>STOARD LEVEL.</u> Ft. Above Perm. Datum _____ D.F. _____					
Well Depth Measured from _____ G.L. _____					
Run No.	Date				
046	18 OCT 70				
First Reading	53.8				
Last Reading	000				
Footage Logged	559				
Depth Reached	520				
Depth Driller					
Casing Hole					
Casing Driller					
Fluid Type	WATER				
Liquid Level	176 FT.				
Min. Diam.					
Operating Time	3 HRS				
Track No.	20				
Recorded By	PETERSON	Witnessed By PETERSON			

GAMMA RAY				NEUTRON							
RUN NO	046			RUN NO	046						
TOOL MODEL NO				LOG TYPE	NEUTRON/NEUTRON						
DIAMETER	1 1/2			TOOL MODEL NO							
DETECTOR MODEL NO				DIAMETER	1 1/2						
TYPE	GEIGER			DETECTOR MODEL NO							
LENGTH	18 INCH			TYPE	PROPORTIONAL						
DISTANCE TO N. SOURCE	8.55 FT			LENGTH	6 INCH						
GENERAL				SOURCE MODEL NO	MRC-N-SS-W						
HOIST TRUCK NO	3020			SERIAL NO	578						
INSTRUMENT TRUCK NO				SPACING	19 INCH.						
TOOL SERIAL NO	CCN2704R65			TYPE	AmBe						
LOGGING DATA				STRENGTH	6.94 x 10 <sup>6</sup> N/S						
GENERAL				GAMMA RAY				NEUTRON			
RUN NO	FROM	TO	SPEED FT/MIN	T.C. SEC	SENS SETTINGS	ZERO DIV L OR R	API GR UNITS PER LOG DIV	T.C. SEC	SENS SETTINGS	ZERO DIV L OR R	API N UNITS PER LOG DIV
1	000	176	11	4	25	0	5 CPS	4	4	12L	28 CPS
	176	559	11	4	25	0	5 CPS	4	4	2L	28 CPS

REMARKS



# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

K-Formation 3013A-1

FILE NO. COMPANY *Fording Coal Limited*

WELL *RH 511*

LOCATION *Greenhills*

FIELD *Fording River*

PROVINCE *British Columbia*

**312**

Permanent Datum: *Ground level* Elev. *ft.* Above Perm. Datum *ft.*  
 Log Measured from: *Ground level* Well Depths Measured from: *0 ft.*

Run No. *One*  
 Date *24 Nov 70*

First Reading *428*  
 Last Reading *000*

Footage Logged *428*  
 Depth Reached *429*  
 Depth Driller *434*  
 Chang. Hole *434*

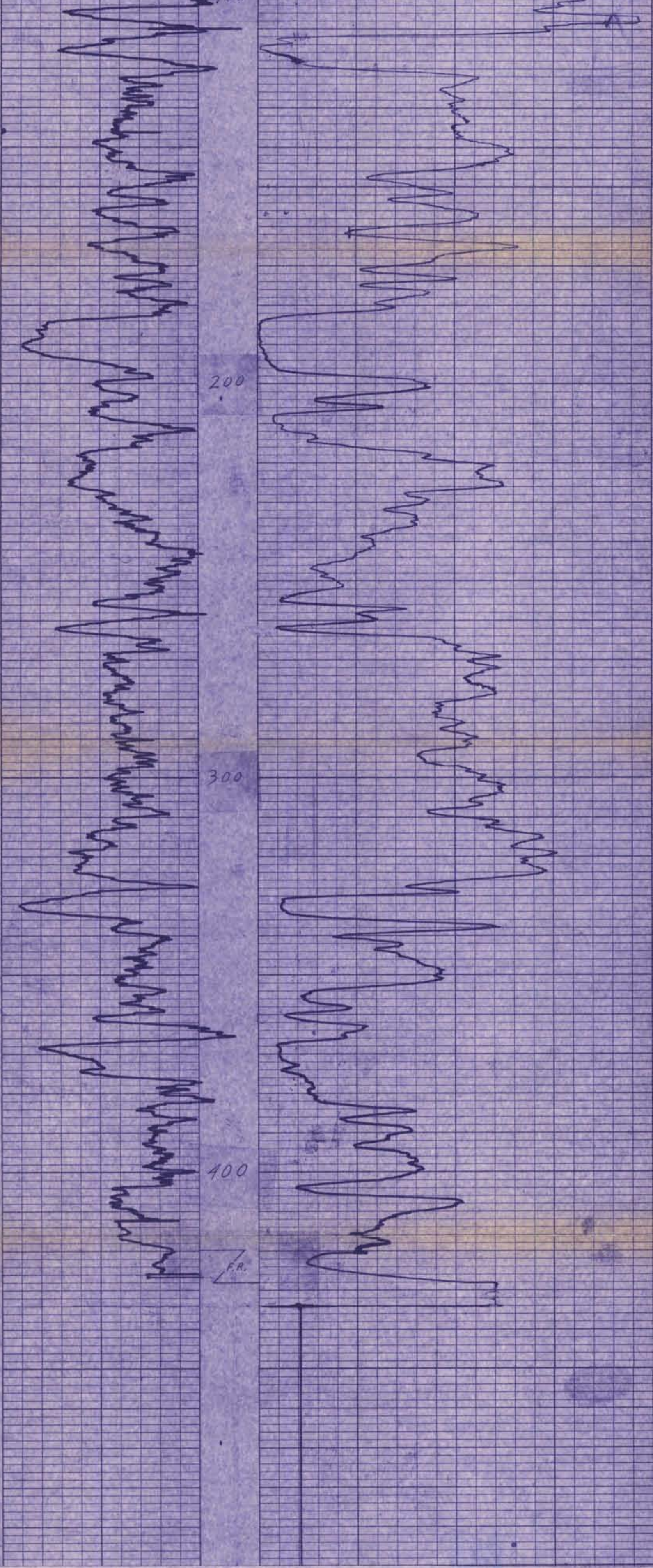
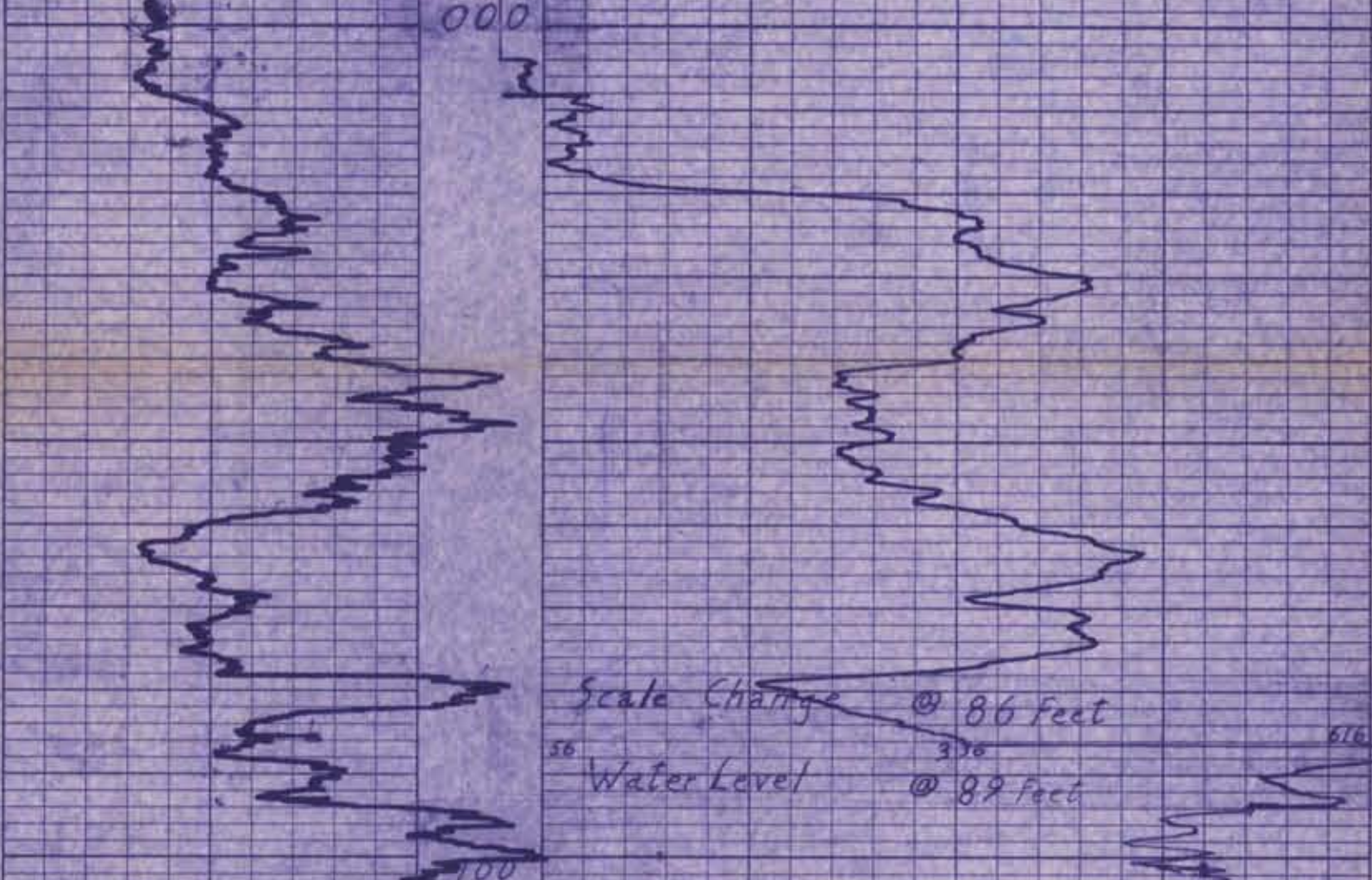
Casing Driller *Alc. Walker*  
 Fluid Type *Air/Water*  
 Liquid Level *89*  
 Diam. *8 1/2*

Operating Time *2 hrs.*  
 Truck No. *10*  
 Recorder By *Linkin* Witnessed By *Parson*

EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	<i>One</i>	RUN NO.	<i>One</i>
TOOL MODEL NO.	<i>1B</i>	LOG. TYPE	<i>NEUTRON/NEUTRON</i>
DIAMETER	<i>1 1/2</i>	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	<i>1 1/2</i>
TYPE	<i>GEIGER</i>	DETECTOR MODEL NO.	
LENGTH	<i>18 INCH</i>	TYPE	<i>PROPORTIONAL</i>
DISTANCE TO N. SOURCE	<i>8.33 FT</i>	LENGTH	<i>6 INCH</i>
GENERAL		SOURCE MODEL NO.	<i>MRC-N-SS-W</i>
HOIST TRUCK NO.	<i>10</i>	SERIAL NO.	<i>606</i>
INSTRUMENT TRUCK NO.		SPACING	<i>19 inch</i>
TOOL SERIAL NO.	<i>CGN270A7B</i>	TYPE	<i>AmBe</i>
		STRENGTH	<i>7.00 x 10<sup>6</sup> N/s</i>

LOGGING DATA											
GENERAL			GAMMA RAY				NEUTRON				
RUN NO.	DEPTHS		SPEED	T.C.	SENS.	ZERO	API G.R. UNITS	T.C.	SENS.	ZERO	API N. UNITS
	FROM	TO	FT/MIN	SEC	SETTINGS	DIV. L OR R	PER LOG DIV	SEC	SETTINGS	DIV. L OR R	PER LOG DIV
<i>One</i>	<i>000</i>	<i>95</i>	<i>11</i>	<i>3</i>	<i>2.5</i>	<i>DL</i>	<i>5 cps</i>	<i>3</i>	<i>4.2</i>	<i>12 L</i>	<i>28 cps</i>
	<i>86</i>	<i>428</i>	<i>11</i>	<i>3</i>	<i>2.5</i>	<i>DL</i>	<i>5 cps</i>	<i>3</i>	<i>4.2</i>	<i>2 L</i>	<i>28 cps</i>

REMARKS





# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

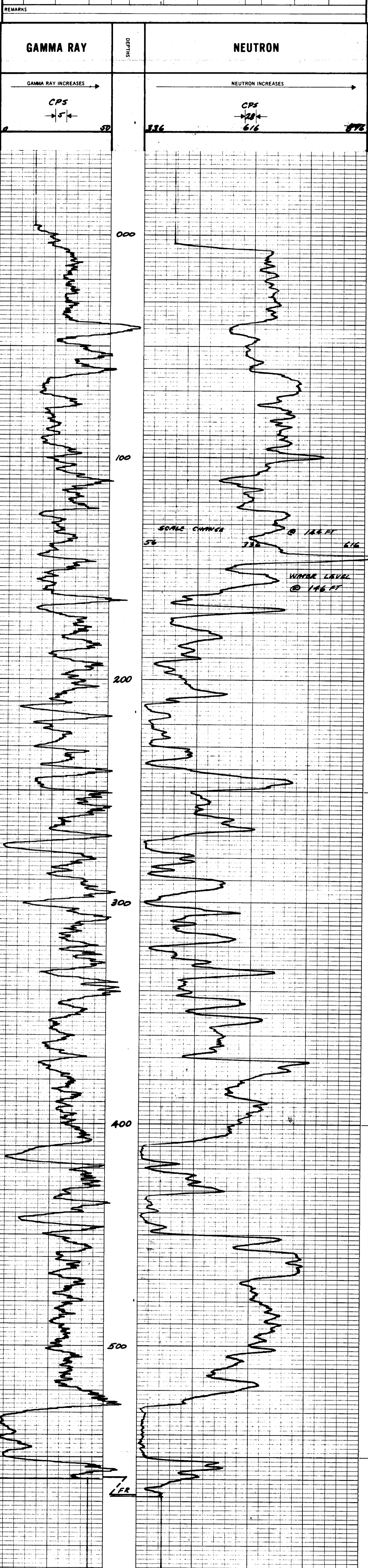
K-FORMING 70(5)A-1

FILE NO.	COMPANY	WELL	LOCATION	FIELD	PROVINCE
	EDWARDS OIL LIMITED	RH 513	GREENHILLS	CARDNO RIVER	ALBERTA
LOG SEC					
TRIP					
ROE					
W					
M					
Permanent Datum	EDWARDS LEVEL	Elev.			
Log Measured from	EDWARDS LEVEL	Fl. Above Perm. Datum			
Well Depth Measured from					
Run No.	ONE	Date	4 DEC 70		
First Reading	567	Last Reading	0		
Footage Logged	587	Depth Reached	568		
Depth Driller		Casing Role			
Casing Order					
Fluid Type	AIR / WATER	Liquid Level	146		
Mfr. Diam.	3 7/8				
Operating Time	2 HRS	Truck No's	10		
Recorded By	BAMAS	Witnessed By	[Signature]		

EQUIPMENT DATA					
GAMMA RAY			NEUTRON		
RUN NO.	ONE			RUN NO.	ONE
TOOL MODEL NO.	1 1/2			LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/2			TOOL MODEL NO.	1 1/2
DETECTOR MODEL NO.	GEIGER			DETECTOR MODEL NO.	
TYPE	18 INCH			TYPE	PROPORTIONAL
LENGTH	8.55 FT			LENGTH	6 INCH
DISTANCE TO N. SOURCE				SOURCE MODEL NO.	MRC-N-SS-W
GENERAL			SERIAL NO.	606	
HOIST TRUCK NO.	10			SPACING	19 INCH
INSTRUMENT TRUCK NO.				TYPE	AmBe
TOOL SERIAL NO.	CGN 27UAA 7B			STRENGTH	7.00x10 <sup>6</sup> N/S

LOGGING DATA											
GENERAL			GAMMA RAY				NEUTRON				
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED FT/MIN	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API GR UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
0	144	11	3	25	0L	5 CPS	3	4.2	12L	28 CPS	
144	567	11	3	25	0L	5 CPS	3	4.2	2L	28 CPS	



# ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

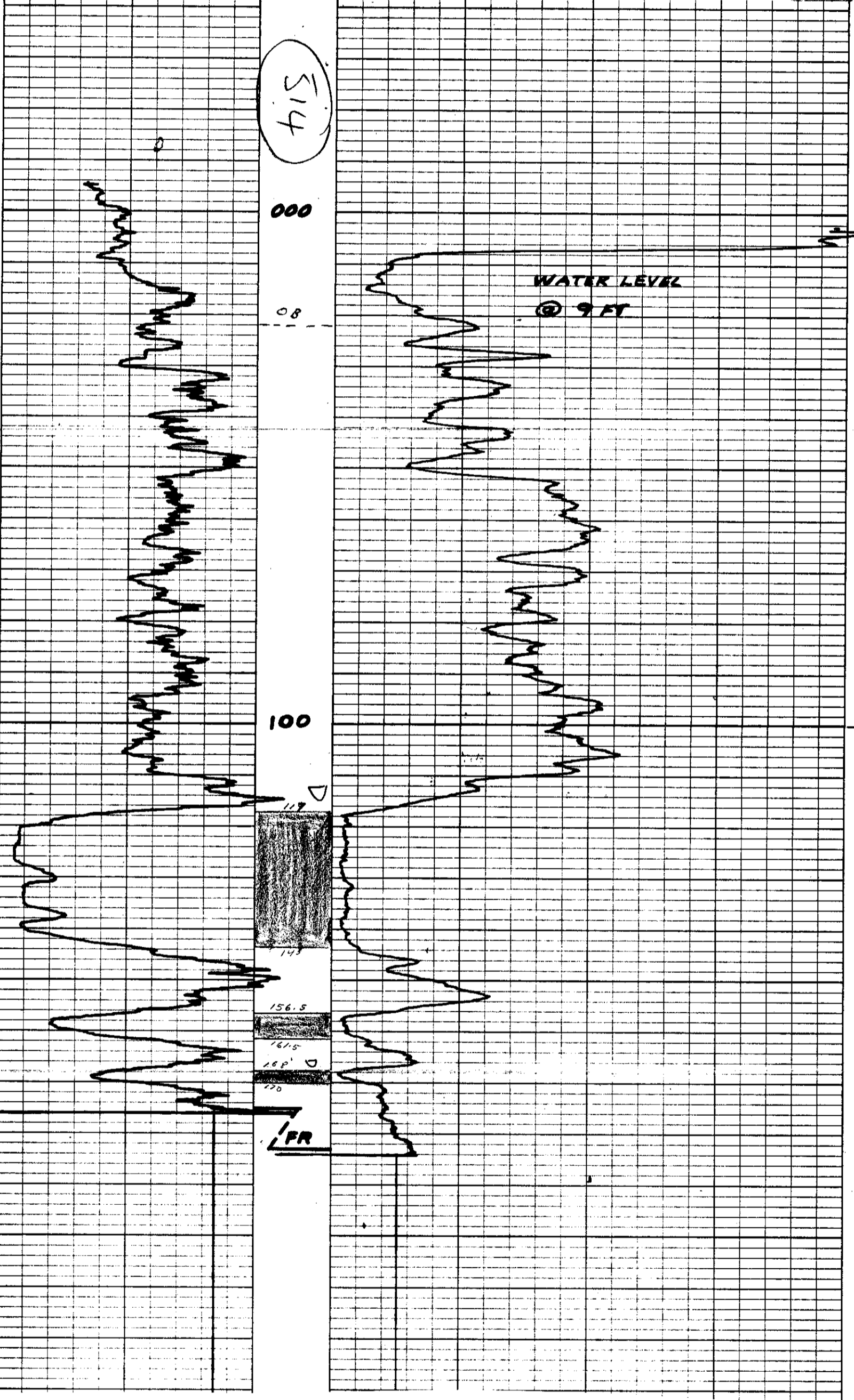
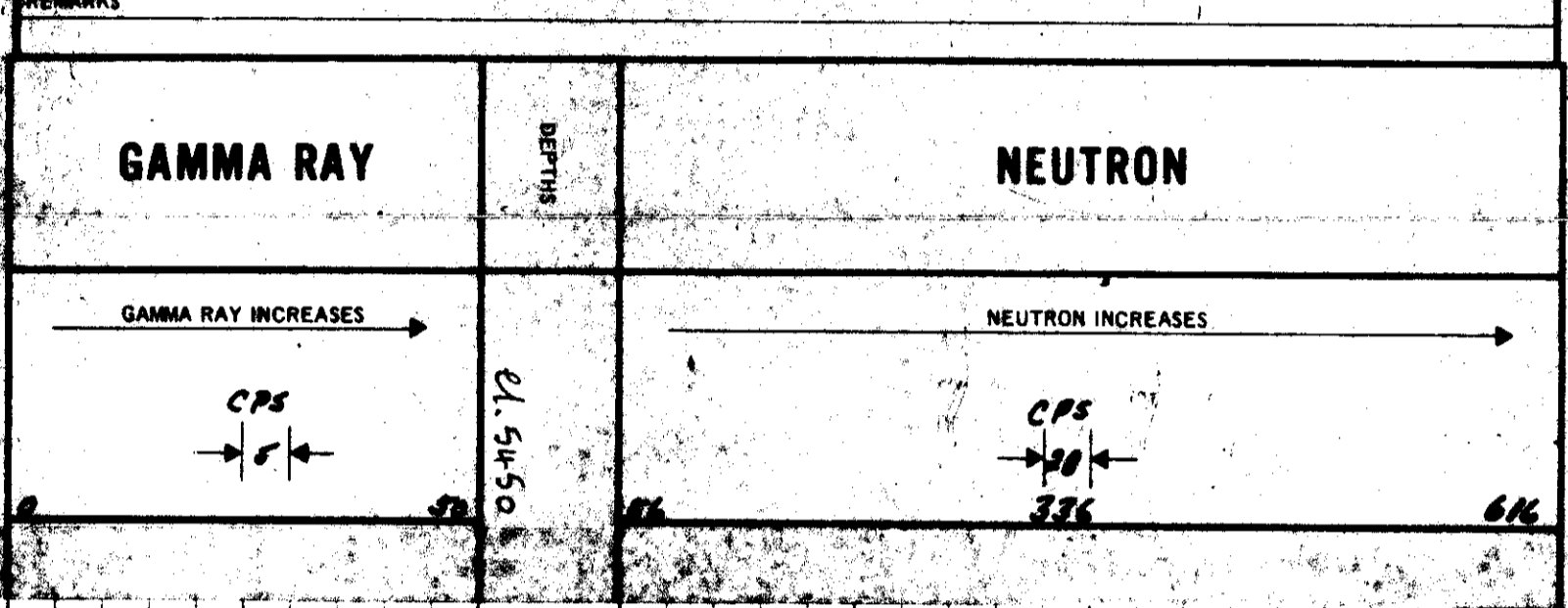
K. FORTIN 7/1/54

FILE NO. \_\_\_\_\_  
 COMPANY **FORBES CARL LIMITED**  
 WELL **RH 514**  
 LOCATION **GREENHILLS**  
 FIELD **FORBES TRAIL**  
 PROVINCE **BRITISH COLUMBIA**  
 License No. \_\_\_\_\_  
 Log measured from \_\_\_\_\_  
 Well depths measured from \_\_\_\_\_  
 Date \_\_\_\_\_  
 Run No. \_\_\_\_\_  
 Tool Model No. \_\_\_\_\_  
 Diameter \_\_\_\_\_  
 Detector Model No. \_\_\_\_\_  
 Type \_\_\_\_\_  
 Length \_\_\_\_\_  
 Distance to N-Source \_\_\_\_\_  
 General \_\_\_\_\_  
 Motor Truck No. \_\_\_\_\_  
 Instrument Truck No. \_\_\_\_\_  
 Tool Serial No. \_\_\_\_\_  
 Operating Time \_\_\_\_\_  
 Truck No. \_\_\_\_\_  
 Recorded by \_\_\_\_\_  
 Witnessed by \_\_\_\_\_

## 312

EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	<b>ONE</b>	RUN NO.	<b>ONE</b>
TOOL MODEL NO.		LOG TYPE	<b>NEUTRON/NEUTRON</b>
DIAMETER	<b>1 1/2</b>	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	<b>1 1/2</b>
TYPE	<b>GEIGER</b>	DETECTOR MODEL NO.	
LENGTH	<b>18 INCH</b>	TYPE	<b>PROPORTIONAL</b>
DISTANCE TO N-SOURCE	<b>8.55 FT</b>	LENGTH	<b>6 INCH</b>
		SOURCE MODEL NO.	<b>MRC-N-SS-W</b>
		SERIAL NO.	<b>606</b>
		SPACING	<b>19 INCH</b>
		TYPE	<b>AmBe</b>
		STRENGTH	<b>7.00 x 10<sup>6</sup> N/S</b>

LOGGING DATA											
GENERAL			GAMMA RAY				NEUTRON				
RUN NO.	DEPTHS FROM	TO	SPEED FT/MIN	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
<b>1</b>	<b>0</b>		<b>1</b>	<b>3</b>	<b>25</b>	<b>04</b>	<b>5 CPS</b>	<b>3</b>	<b>4-2</b>	<b>24</b>	<b>28 CPS</b>





R- Facorok 70(3)A-1

# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

COMPANY **FORDING CORP LIMITED**

WELL **RH 515**

LOCATION **GREENHILLS**

FIELD **FORDING RIVER**

PROVINCE **BRITISH COLUMBIA**

# 312

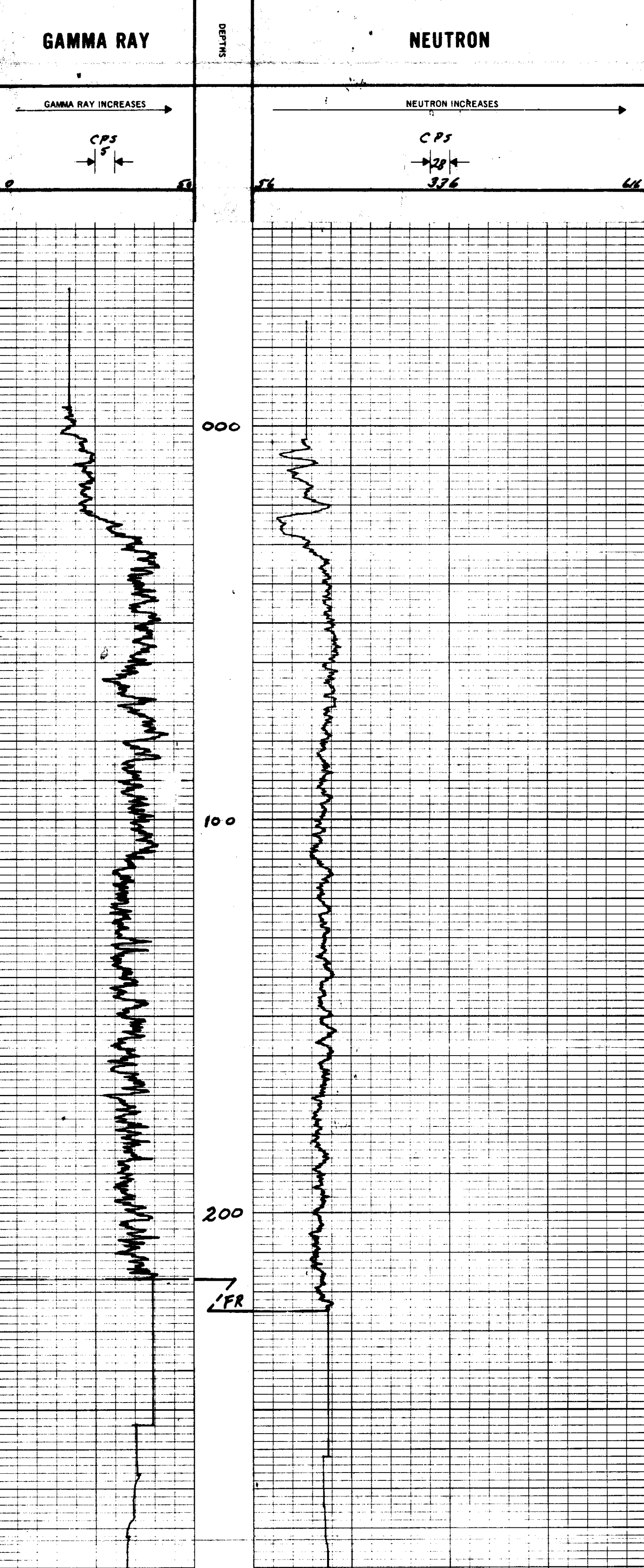
Permanent Datum **GRAND LEVEL** Elev. \_\_\_\_\_ K.B. \_\_\_\_\_  
 Log Measured from **GRAND LEVEL** Ft. Above Perm. Datum D.F. \_\_\_\_\_  
 Well Depths Measured from \_\_\_\_\_ G.L. \_\_\_\_\_

Run No.	<b>ONE</b>
Date	<b>17 Dec 70</b>
First Reading	<b>225</b>
Last Reading	<b>0</b>
Footage Logged	<b>225</b>
Depth Reached	<b>224</b>
Depth Driller	<b>222</b>
Casing Roke	<b>222</b>
Casing Driller	
Fluid Type	<b>WATER</b>
Liquid Level	<b>FULL</b>
Mfn. Diam.	
Operating Time	<b>2 HRS</b>
Truck No.?	<b>10</b>
Recorded By	<b>BANKS</b>
Witnessed By	<b>PARSON</b>

EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	<b>ONE</b>	RUN NO.	<b>ONE</b>
TOOL MODEL NO.		LOG TYPE	<b>NEUTRON/NEUTRON</b>
DIAMETER	<b>1 1/2</b>	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	<b>1 1/2</b>
TYPE	<b>GEIGER</b>	DETECTOR MODEL NO.	
LENGTH	<b>18 INCH</b>	TYPE	<b>PROPORTIONAL</b>
DISTANCE TO N. SOURCE	<b>8.55 FT</b>	LENGTH	<b>6 INCH</b>
		SOURCE MODEL NO.	<b>MRC-N-SS-W</b>
GENERAL		SERIAL NO.	<b>606</b>
HOIST TRUCK NO.	<b>10</b>	SPACING	<b>19 INCH</b>
INSTRUMENT TRUCK NO.		TYPE	<b>AmBe</b>
TOOL SERIAL NO.	<b>CGN 2704A 78</b>	STRENGTH	<b>700x10<sup>6</sup> N/S</b>

LOGGING DATA											
RUN NO.	GENERAL DEPTHS		SPEED FT/MIN.	T.C. SEC.	GAMMA RAY			NEUTRON			
	FROM	TO			SENS SETTINGS	ZERO DIV. L OR R	API G R UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
<b>1</b>	<b>0</b>	<b>225</b>	<b>11</b>	<b>3</b>	<b>25</b>	<b>0L</b>	<b>5 CPS</b>	<b>3</b>	<b>4.2</b>	<b>2L</b>	<b>28 CPS</b>

REMARKS



# ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

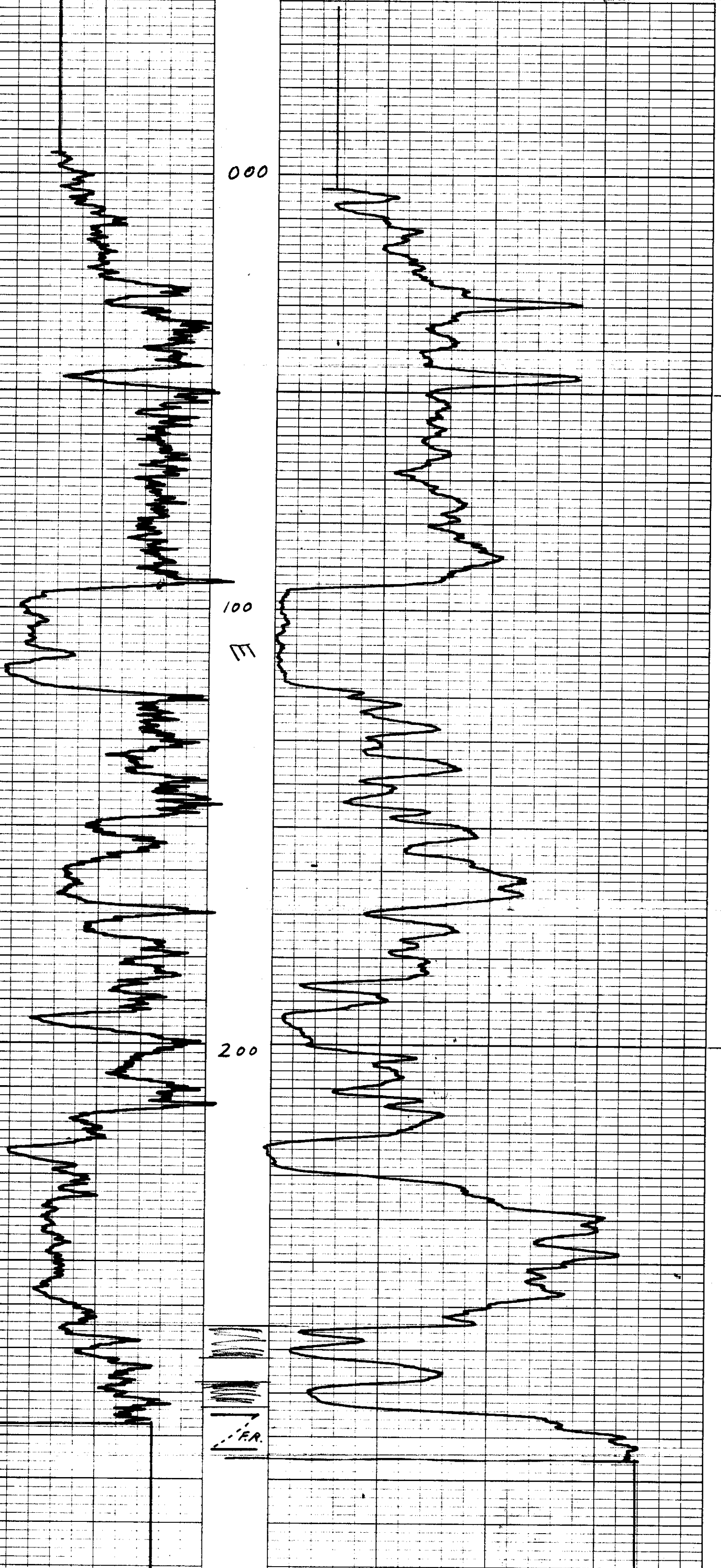
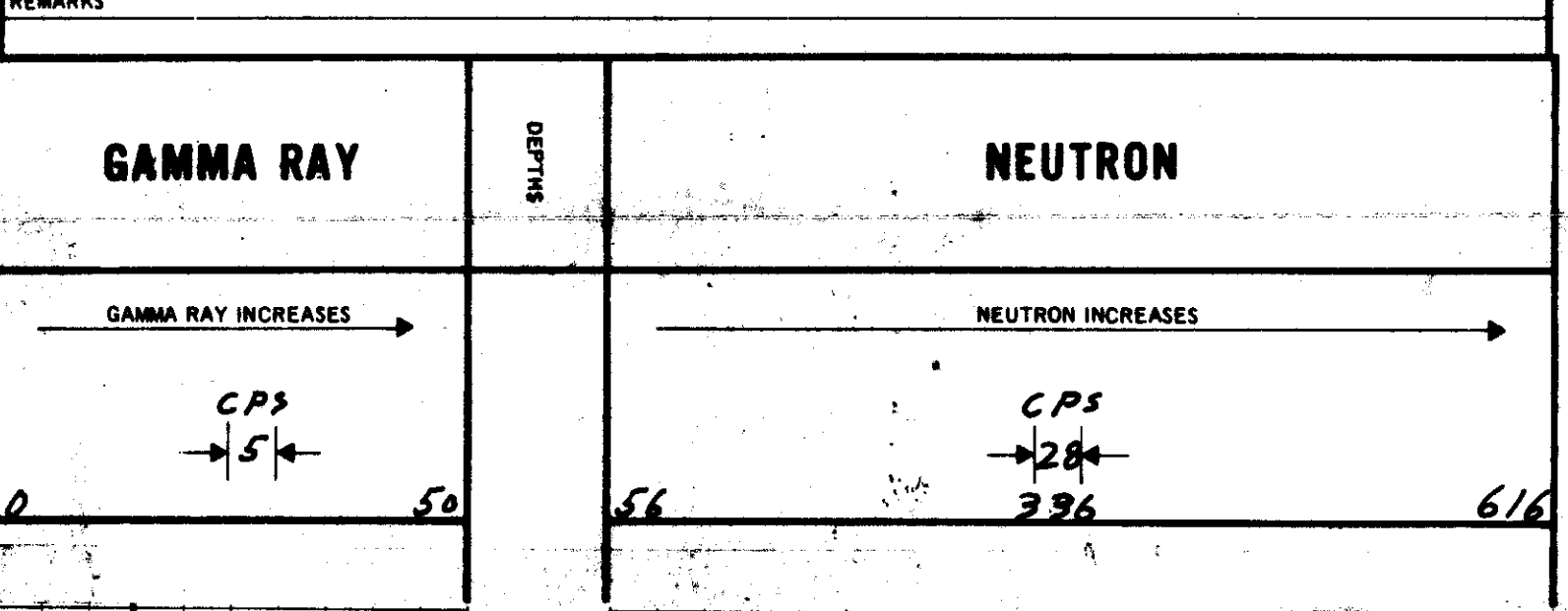
GAMMA RAY NEUTRON LOG

K - FORDING 70(5)A-1

FILE NO.	COMPANY	Fording Coal Limited	
LSD	WELL	RH 516	
SEC	LOCATION	Greenhills	
TWP	FIELD	Fording River	
RGE		<b>312</b>	
W			
M	PROVINCE	British Columbia	
	Permanent Datum	Green Level	Elv. _____
	Log Measured from	Ground Level	ft. Above Perm. Datum _____
	Null Depth Measured from		D.F. _____
			O.L. _____
Run No.	Two		
Date	22 Dec 70		
First Reading	293		
Last Reading	0		
Footage Logged	293		
Depth Reached	294		
Depth Driller	311		
Casing Role			
Casing Driller			
Fluid Type	Water		
Liquid Level	Flowing		
Min. Diam.	3 7/8		
Operating Time	2 Hrs		
Truck No.	10		
Recorded By	Larkin		
Witnessed By	TAPLIN		

EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	Two	RUN NO.	Two
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	1 1/2	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	1 1/2
TYPE	GEIGER	DETECTOR MODEL NO.	
LENGTH	18 INCH	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	8.55 FT	LENGTH	6 INCH
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO	606
MOIST TRUCK NO	10	SPACING	19 inch
INSTRUMENT TRUCK NO		TYPE	AmBe
TOOL SERIAL NO.	CGN27UAA78	STRENGTH	7.00x10 <sup>6</sup> N/S

LOGGING DATA											
GENERAL			GAMMA RAY				NEUTRON				
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED FT/MIN	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
2	0	293	11	3	25	OL	5 cps	3	1.2	2L	28 cps



# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

K-FRONT 70/3A-1

FILE NO.

COMPANY **FORBES COAL LIMITED**

WELL **RH 517**

LOCATION **GREENHILLS**

FIELD **FORBES RIVER**

**312**

PROVINCE **BRITISH COLUMBIA**

Permanent Datum **SEALED LEVEL** Elev. \_\_\_\_\_

Log Measured from **SEALED LEVEL** Ft. Above Perm. Datum \_\_\_\_\_

Well Depth Measured from \_\_\_\_\_

Date **21 DEC 70**

First Reading **2.98**

Last Reading **0**

Footage Logged **0**

Depth Reached **2.98**

Depth Driller **300**

Casing Hole \_\_\_\_\_

Casing Driller \_\_\_\_\_

Fluid Type **AIR/NUD**

Liquid Level **24**

Min. Diam. \_\_\_\_\_

Operating Time **2 HRS**

Truck No's **10**

Recorded By **LARKIN**

Witnessed By **TORUN**

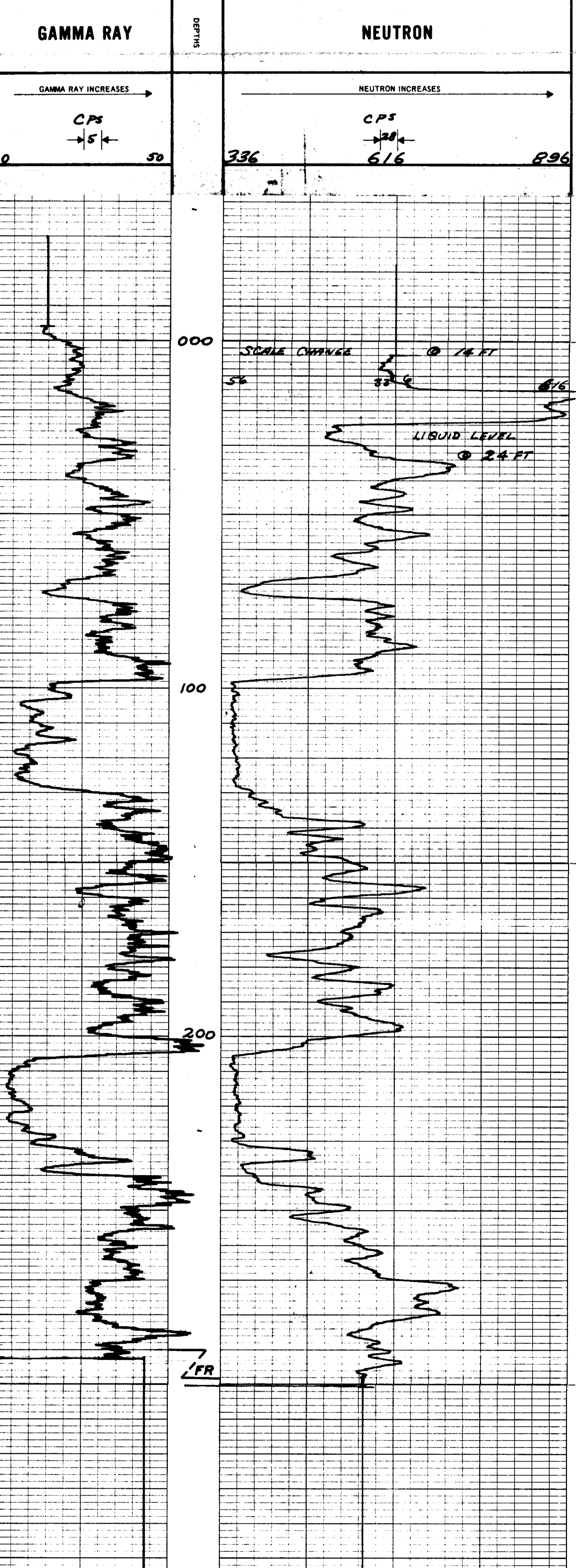
### EQUIPMENT DATA

GAMMA RAY				NEUTRON			
RUN NO.	<b>ONE</b>			RUN NO.	<b>ONE</b>		
TOOL MODEL NO.				LOG TYPE	<b>NEUTRON/NEUTRON</b>		
DIAMETER	<b>1 1/2</b>			TOOL MODEL NO.			
DETECTOR MODEL NO.				DIAMETER	<b>1 1/2</b>		
TYPE	<b>GEIGER</b>			DETECTOR MODEL NO.			
LENGTH	<b>18 INCH</b>			TYPE	<b>PROPORTIONAL</b>		
DISTANCE TO N. SOURCE	<b>8.55 FT</b>			LENGTH	<b>6 INCH</b>		
GENERAL				SOURCE MODEL NO.	<b>MRC-N-SS-W</b>		
HOIST TRUCK NO.	<b>10</b>			SERIAL NO.	<b>606</b>		
INSTRUMENT TRUCK NO.				SPACING	<b>19 INCH</b>		
TOOL SERIAL NO.	<b>CEN 2704A 78</b>			TYPE	<b>AmBe</b>		
				STRENGTH	<b>7.00x10<sup>6</sup> N/S</b>		

### LOGGING DATA

RUN NO.	GENERAL DEPTHS		SPEED FT/MIN	T.C. SEC.	GAMMA RAY			NEUTRON			
	FROM	TO			SENS SETTINGS	ZERO DIV. L OR R	API GR. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	0	14	11	3	25	0L	5 CPS	3	4.2	12L	28 CPS
	14	298	11	3	25	0L	5 CPS	3	4.2	2L	28 CPS

REMARKS



Tumbull Mountain K-FACTORS 7-1-41

PH 600 to PH 608

Running: 605

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

COMPANY **PARDIG COAL LIMITED**

WELL **PH 600**

LOCATION **TUMBUILL MOUNTAIN**

FIELD **PARDIG RIVER**

PROVINCE **BRITISH COLUMBIA**

Log Measured from **GROUND LEVEL** Elev. **5700** Ft. Above Perm. Datum

Run No. **35387170**

Date **5-5-57**

First Reading **557**

Last Reading **600**

Footage Logged **557**

Depth Reached **557**

Depth Driller **WASER**

Casing Role **6 1/2"**

Fluid Type **WATER**

Operating Time **8 HRS.**

Recorded By **PETERSON** Witnessed By **ZANSON**

**312**

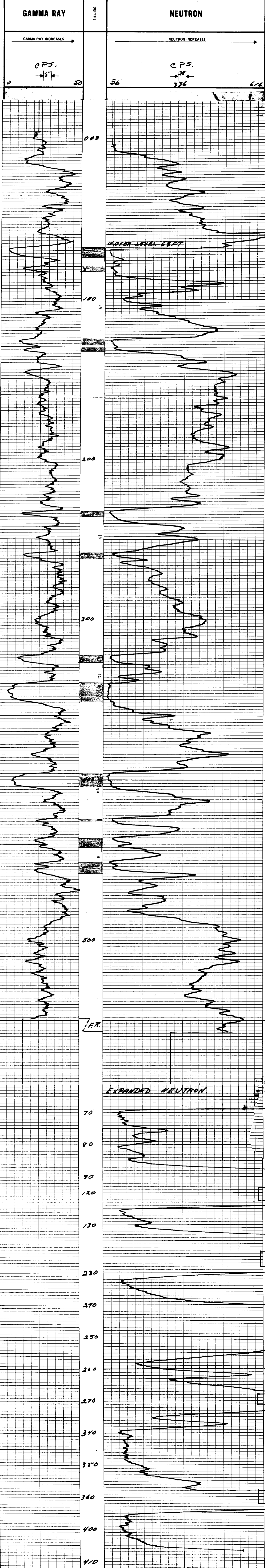
EQUIPMENT DATA

GAMMA RAY				NEUTRON			
RUN NO.	ONE			RUN NO.	ONE		
TOOL MODEL NO.	1H			LOG TYPE	NEUTRON/NEUTRON		
DIAMETER	1 1/2			TOOL MODEL NO.	1H		
DETECTOR MODEL NO.	GEIGER			DIAMETER	6 INCH		
TYPE	18 INCH			DETECTOR MODEL NO.	MRC-N-SS-W		
LENGTH	8.55 FT			TYPE	578		
DISTANCE TO N. SOURCE	GENERAL			LENGTH	19 INCH		
	HOIST TRUCK NO. 2020			SOURCE MODEL NO.	ArBe		
	INSTRUMENT TRUCK NO.			SERIAL NO.	6.94 x 10 <sup>6</sup> N/S		
	TOOL SERIAL NO. 6ENR70965			SPACING			
				TYPE			
				STRENGTH			

LOGGING DATA

RUN NO.	GENERAL		GAMMA RAY				NEUTRON			
	FROM	TO	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API GR. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1000	557	11	4	25	0	5 CPS.	4	4	20	20 CPS.

REMARKS



K-FACTOR 7631A-1

# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO. COMPANY **FORBING COAL LIMITED**

WELL **DDH 601**

LOCATION **TANIBULL MOUNTAIN**

FIELD **FORBING RIVER**

PROVINCE **BRITISH COLUMBIA**

Permanent Datum **CROUND LEVEL** Elev. \_\_\_\_\_

Log Measured from **CROUND LEVEL** Ft. Above Perm. Datum \_\_\_\_\_

Well Depth Measured from \_\_\_\_\_

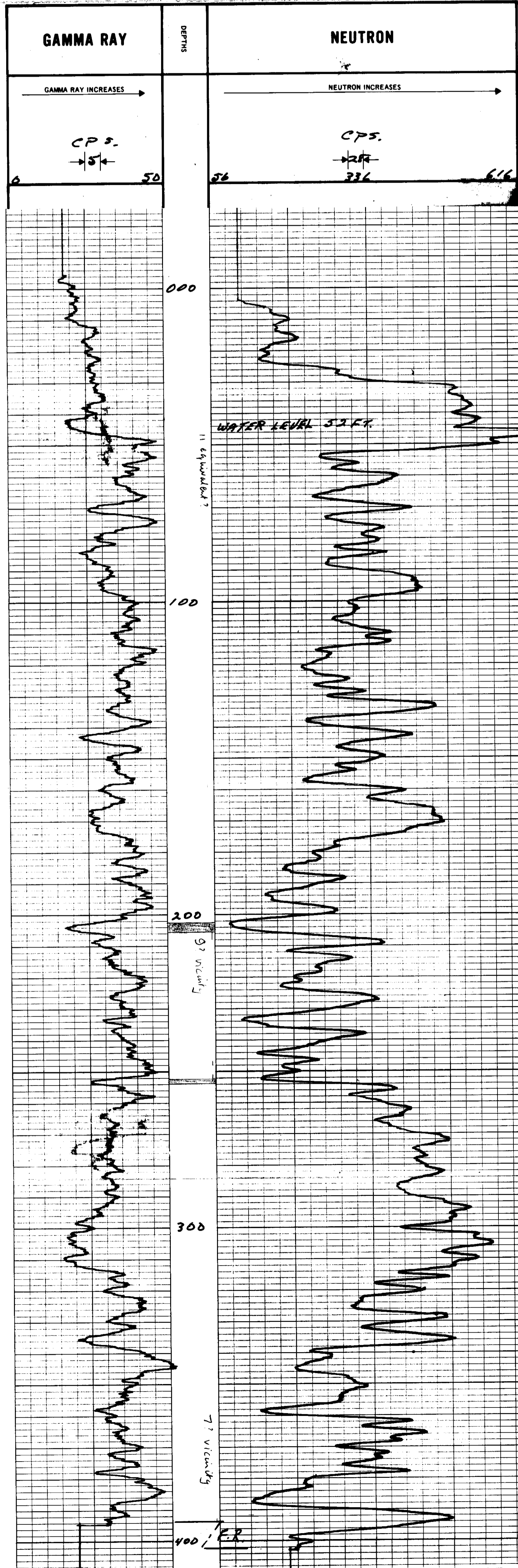
Run No.	<b>1</b>
Date	<b>25 FEB 1970</b>
First Reading	<b>402</b>
Last Reading	<b>000</b>
Footage Logged	<b>402</b>
Depth Reached	<b>403</b>
Depth Driller	
Casing Rate	
Casing Driller	
Fluid Type	<b>WATER</b>
Liquid Level	<b>52 FT.</b>
Min. Diam.	
Operating Time	<b>3 HRS.</b>
Truck No.	<b>32</b>
Recorded By <b>PIERSON</b>	Witnessed By <b>PEARSON</b>

## 312

EQUIPMENT DATA					
GAMMA RAY			NEUTRON		
RUN NO.	<b>ONE</b>			RUN NO.	<b>ONE</b>
TOOL MODEL NO.				LOG TYPE	<b>NEUTRON/NEUTRON</b>
DIAMETER	<b>1 1/2</b>			TOOL MODEL NO.	
DETECTOR MODEL NO.				DIAMETER	<b>1 1/2</b>
TYPE	<b>GEIGER</b>			DETECTOR MODEL NO.	
LENGTH	<b>18 INCH</b>			TYPE	<b>PROPORTIONAL</b>
DISTANCE TO N. SOURCE	<b>8.55 FT</b>			LENGTH	<b>6 INCH</b>
GENERAL			SOURCE MODEL NO.	<b>MRC-N-SS-W</b>	
HOIST TRUCK NO.	<b>30-20</b>			SERIAL NO.	<b>578</b>
INSTRUMENT TRUCK NO.				SPACING	<b>19 INCH</b>
TOOL SERIAL NO.	<b>CEN2704A65</b>			TYPE	<b>AmBe</b>
			STRENGTH	<b>6.94 x 10<sup>6</sup> N/S</b>	

LOGGING DATA											
RUN NO.	DEPTHS		SPEED FT/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API GR UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
	FROM	TO									
1	000	402	11	4	25	0	5 CPS	4	4	22	29 CPS



# Widco\*

# WELL LOG

COMPANY  
WELL **RH 602**  
LOCATION **TURNBULL**

COMPANY  
AREA **TURNBULL MT.**  
WELL **RH 602**  
COUNTY STATE

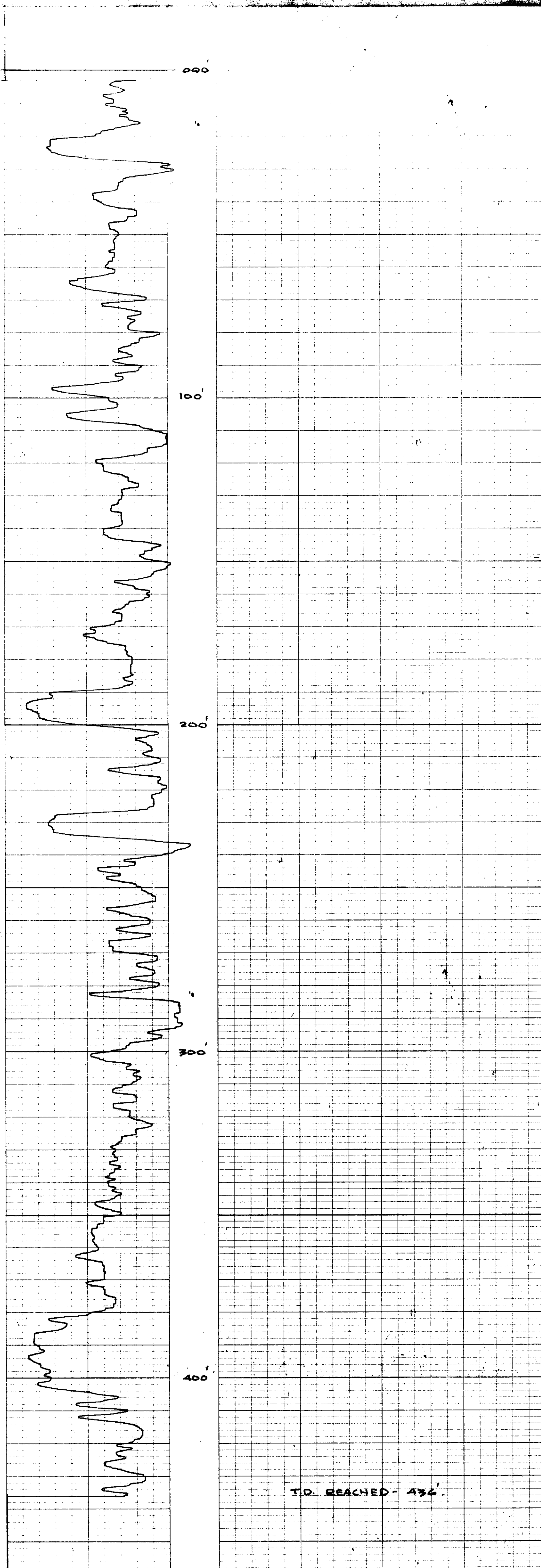
COORDINATES  
N  
S  
ELEVATION  
DF  
KB  
GI

Date	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
First Reading			Nature		
Last Reading			Density		
Footage Logged			Viscosity	a	F
Bottom (Driller)			Resistivity	a	F
Casing (From Log)			Res. @ BHT	a	F
Casing (Driller)			pH		
Casing Size			Circ. Temp		
Bit Size			BH Temp		
Bit Size			Logged by	W. SHAW	
Bit Size			Witnessed by		

REMARKS **35 A.P.I**

# 312

F. K. FREDRICKS  
7055101



TD. REACHED - 436'

# Widco WELL LOG

COMPANY: **RH 603**  
 LOCATION: **TURNBULL Mtn.**

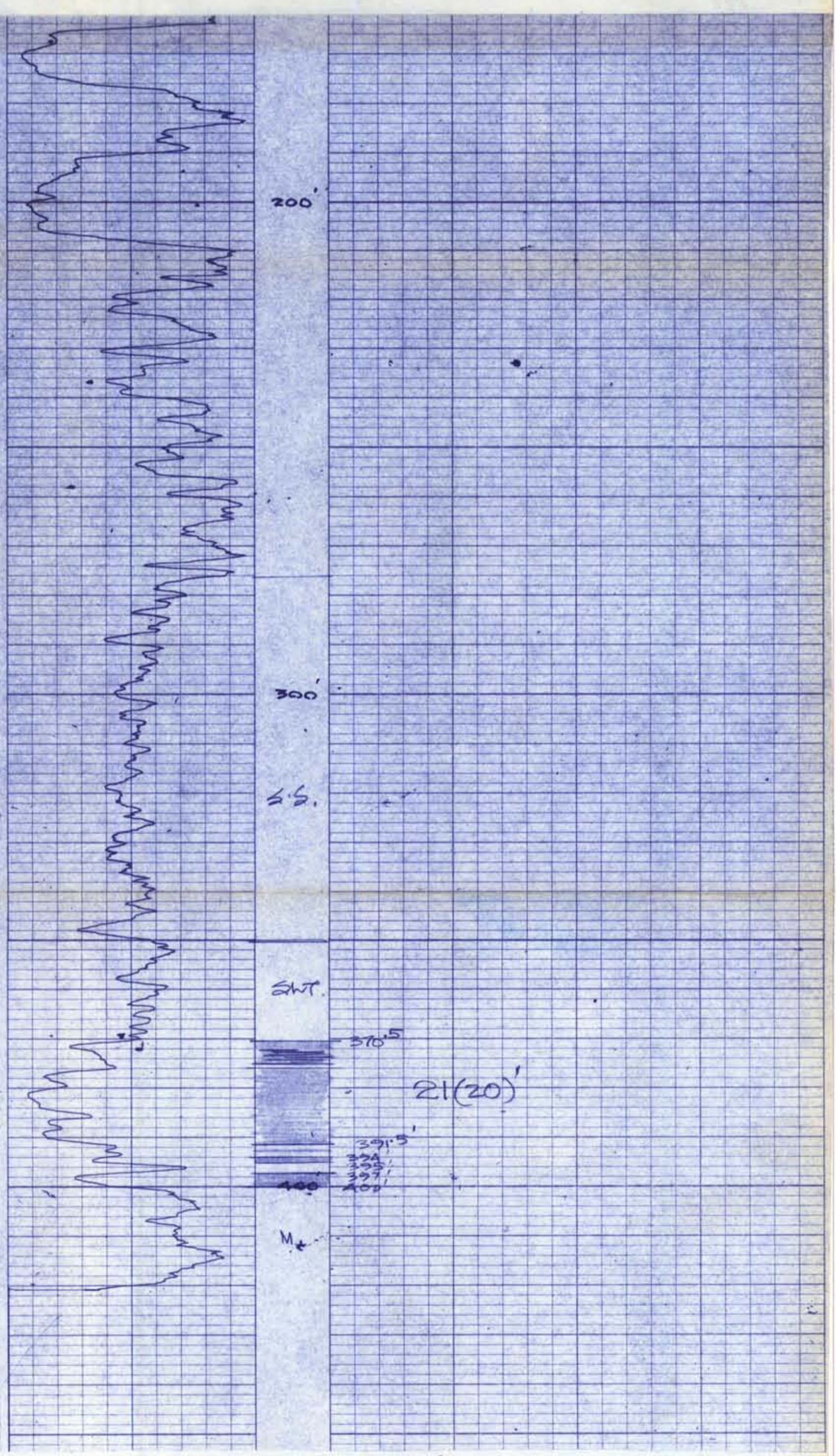
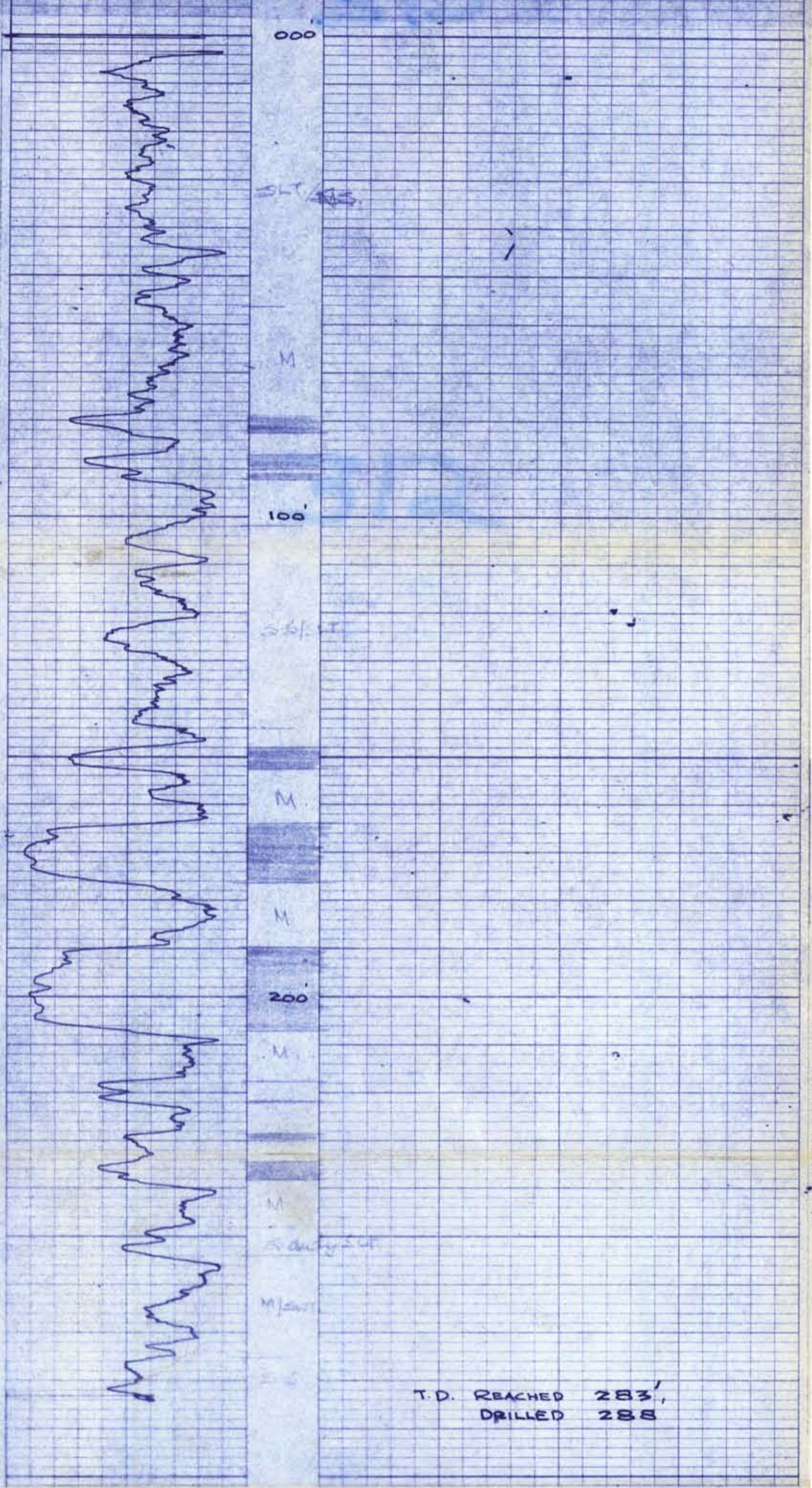
COMPANY: \_\_\_\_\_  
 AREA: **TURNBULL Mtn.**  
 WELL: **RH 603**  
 COUNTY: \_\_\_\_\_ STATE: \_\_\_\_\_

COORDINATES  
 N: \_\_\_\_\_  
 S: \_\_\_\_\_  
 ELEVATION  
 01: \_\_\_\_\_  
 02: \_\_\_\_\_  
 03: \_\_\_\_\_

Date	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
Full Sealing			Moisture		
Lost Circulation			Density		
Fluids Logged			Viscosity		
Bottom (Order)			Resistivity		
Casing (From Top)			Res. to SHI		
Casing (Bottom)			pH		
Casing Size			Cas. Temp		
Bit Size			B.H. Temp		
Bit Size			Logged by	<b>W. SHAW</b>	
			Witnessed by		

REMARKS: **312**

KROONK (P)



# Widco\*

# WELL LOG

COMPANY  
WELL  
LOCATION

RH 604

TURNBULL

COMPANY  
AREA  
WELL  
COUNTY STATE

TURNBULL MT.  
RH 604

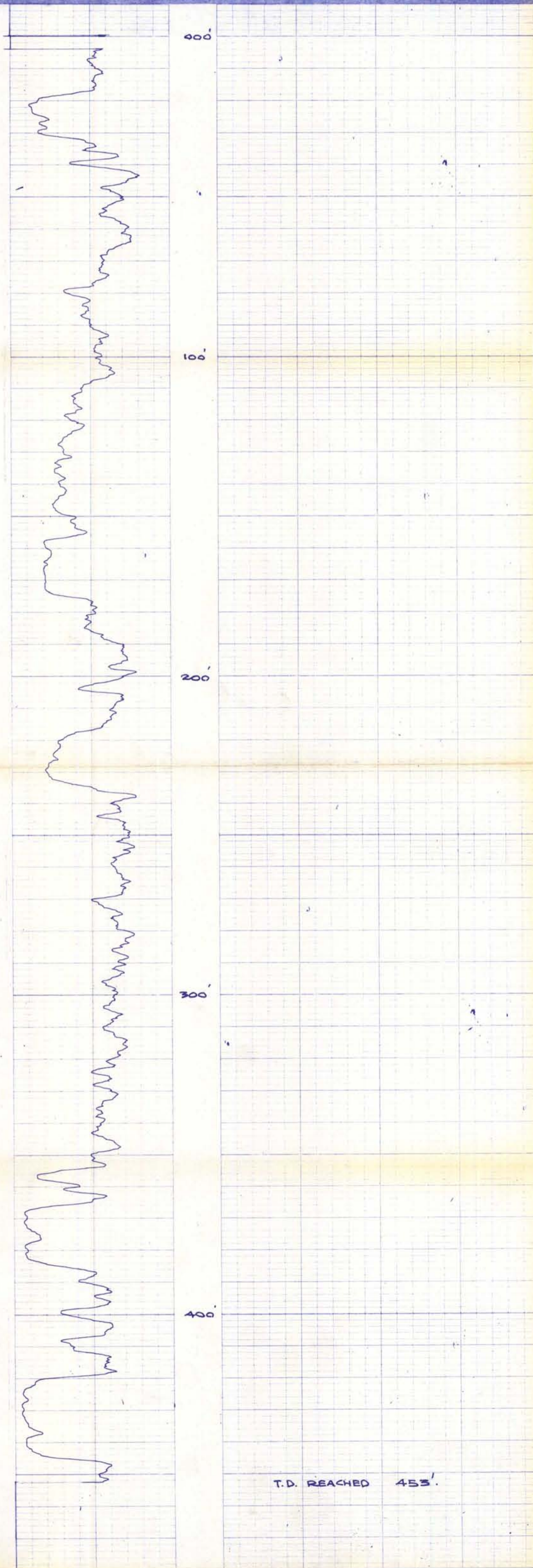
COORDINATES  
N  
S  
ELEVATION  
DF  
KB  
GA

Date	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
First Reading			Nature		
Last Reading			Density		
Footage Logged			Viscosity		
Bottom (Driller)			Resistivity		
Casing (From Log)			Res. @ BHT		
Casing (Driller)			pH		
Casing Size			Circ. Temp		
Bit Size			B.H. Temp		
Bit Size			Logged by	W. SHAW	
Bit Size			Witnessed by		

K- FOLDING  
70631A-1

REMARKS  
\$3 A.P.T. 312

\* Reg. U.S. Pat. Off.





# Widco\*

# WELL LOG

COMPANY \_\_\_\_\_  
WELL RH 606  
LOCATION TURNBULL

COMPANY \_\_\_\_\_  
AREA TURNBULL  
WELL RH 606  
COUNTY \_\_\_\_\_ STATE \_\_\_\_\_

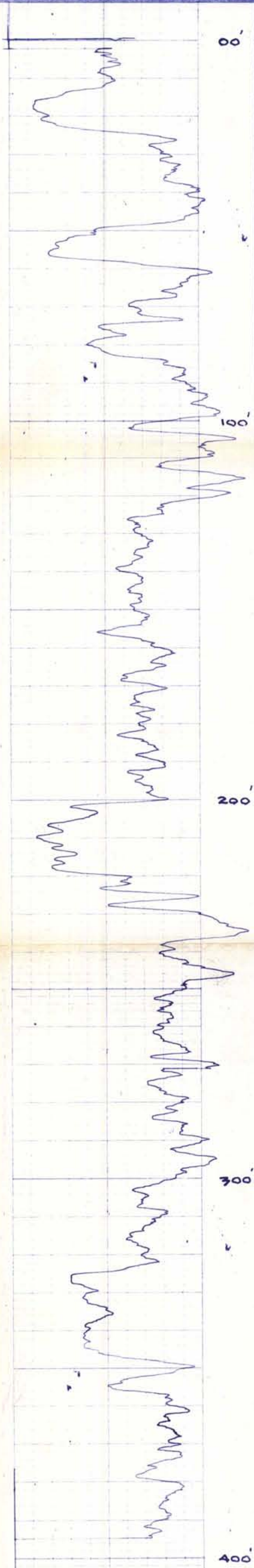
COORDINATES:  
N \_\_\_\_\_  
S \_\_\_\_\_  
ELEVATION:  
D.F. \_\_\_\_\_  
K.B. \_\_\_\_\_  
G.I. \_\_\_\_\_

	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
Date			Nature		
First Reading			Density		
Last Reading			Viscosity	@ F	@ F
Footage Logged			Resistivity	@ F	@ F
Bottom (Driller)			Res. @ BHT	@ F	@ F
Casing (From Log)			pH		
Casing (Driller)			Circ. Temp.		
Casing Size			B.H. Temp.		
Bit Size					
Bit Size					
			Logged by	<u>W. SHAW.</u>	
			Witnessed by		

REMARKS 29 A.P.I  
Nov. 12 '75

\* Reg. U.S. Pat. Off.

K-1 FRODOINK 74131A-1



T.D. REACHED 395'  
DRILLED 400'

# Widco\*

# WELL LOG

COMPANY \_\_\_\_\_  
 WELL RH 607  
 LOCATION TURNBULL

COMPANY \_\_\_\_\_  
 AREA TURNBULL  
 WELL RH 607  
 COUNTY \_\_\_\_\_ STATE \_\_\_\_\_

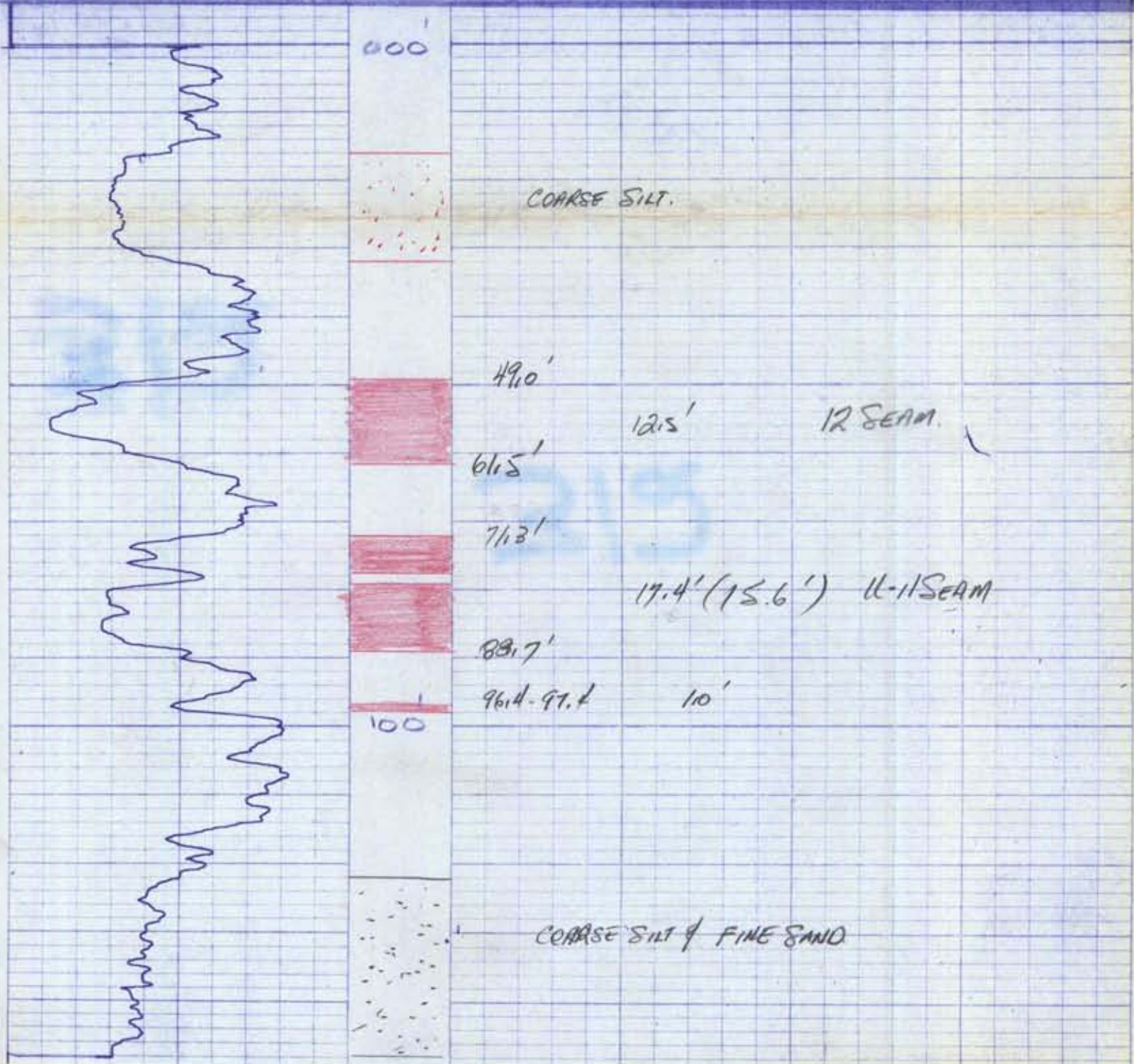
COORDINATES: \_\_\_\_\_  
 N \_\_\_\_\_  
 S \_\_\_\_\_  
 ELEVATION: \_\_\_\_\_  
 D.F. \_\_\_\_\_  
 K.B. \_\_\_\_\_  
 G.L. \_\_\_\_\_

K-Feather 703A-1

Date	Run No. 1	Run No. 2	MUD Nature Density Viscosity Resistivity Res. @ BHT pH Circ Temp B.H. Temp	Run No. 1		Run No. 2	
				a	F	a	F
First Reading							
Last Reading							
Footage Logged							
Bottom (Driller)							
Casing (From Log)							
Casing (Driller)							
Casing Size							
Bit Size							
Bit Size							
			Logged by	<u>R. SHANKS</u>			
			Witnessed by				

REMARKS: COAL ABOVE COLLAR NOV. 24 '75  
312

Reg. U.S. Pat. Off.



# Widco

# WELL LOG

COMPANY  
WELL  
LOCATION

RH 608

TURNBILL

COMPANY  
AREA  
WELL  
COUNTY STATE

TURNBILL  
RH 608

COORDINATES:  
N  
S  
ELEVATION:  
D.F.  
K.B.  
G.I.

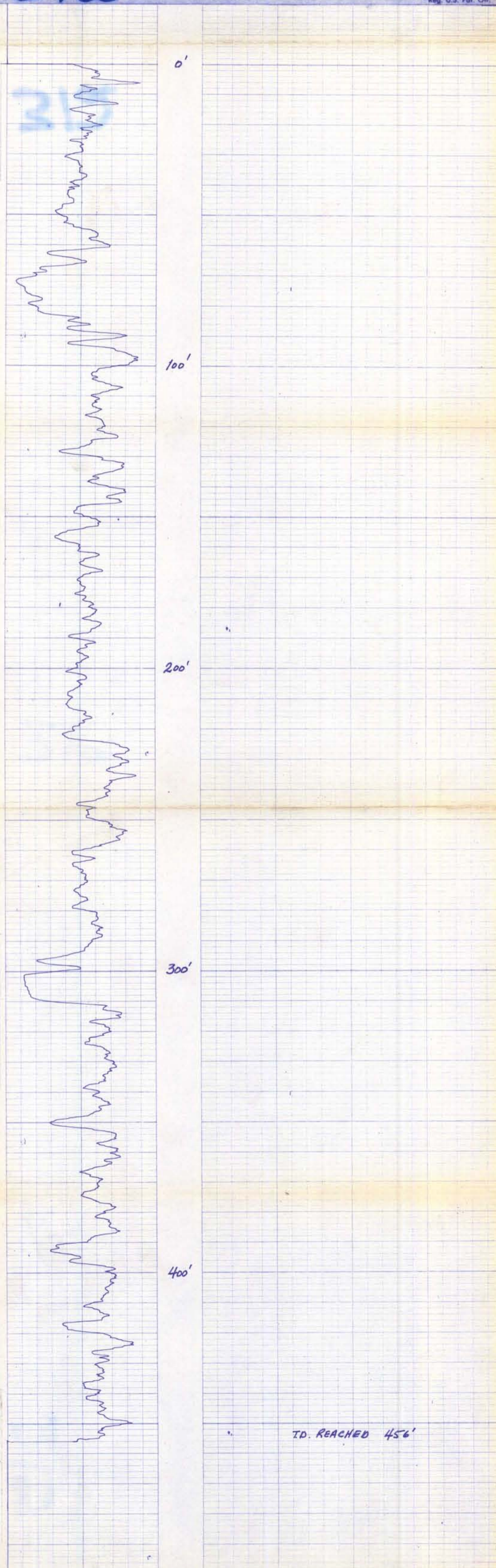
Date	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
First Reading			Nature		
Last Reading			Density		
Footage Logged			Viscosity	@ F	@ F
Bottom (Driller)			Resistivity	@ F	@ F
Casing (From Log)			Res. @ BHT	@ F	@ F
Casing (Driller)			pH		
Casing Size			Circ. Temp.		
Bit Size			B.H. Temp.		
Bit Size					
			Logged by	W. SHAW	
			Witnessed by		

REMARKS  
LOGGED THROUGH STEM 27.5 a.p.i.  
Nov 21 '75

312

K-Feeding 7(5)  
A-1

Reg. U.S. Pat. Off.



# Diamond Drill Geological Log



K-FROING 70(3)A-2

McAULEY DRILLING COMPANY

312

Objective:

Sampled:

40- Scale

Color Plot & Dips

Ore Classes & Aver.

Logged By: S.B. BUTRENCHUK

Date: MARCH, 1970

Composites:

Block:

Sect.:

Place: TURNBULL

App. Bear:

App. Dip:

Length:

From To Discard: Reason:

0	21	Sand and gravel.	
21	75	Shale.	Revised by radiation log <b>NOT SAMPLED</b> <b>- SINGLE WALL PIPE</b>
75	86	Grey shale.	
86	87	Coal.	
87	113	Grey shale at 91.5 feet to 0.6 feet coal.	
113	119.5	Coal.	112.5 - 119.0 Actual seam #9
119.5	155	Grey shale.	
155	195.5	Grey shale - hard bands. Coal traces, between 148 feet and 149.5 feet and from 193 feet to 195.5 feet.	
195.5	214	Coal at 205 feet - 0.5 feet shale. At 207 feet - 0.5 feet shale.	194 - 211 actual } 202.5 - 204.0 shale } seam 7 211.0 - 213.5 shale 213.5 - 214.5 shaly coal
214	215	Grey shale.	
215	216	Coal with trace of shale.	
216	234	Shale.	
234	241	Sandstone, very hard.	
241	280	Shale.	
280	281	Shaley coal.	
281	321	Coal.	280 - 322 Seam 5 317 - 320 shale
321	326	Shaley coal.	
326	341	Shale.	
341	368	Grey shale, coal traces from 350 to 355 feet.	
368	385	Grey sandstone, hard.	Core Size 4 1/2"
385	415	Sandstone, very hard.	
415	436	Sandstone, very hard.	
436	456.5	Grey sandstone, hard.	

Hole No.

RH 78

Page

1

# Diamond Drill Geological Log



McAULEY DRILLING COMPANY

Objective:

Sampled:

Logged By: S.B. BUTRENCHUK

Date: MARCH, 1970

Composites:

Block:

Sect.:

Place:

App. Bear:

App. Dip.:

Length:

TURNBULL

From To Discard: Reason:

456.5	459	Grey shale, coal traces.		458.5 - 464.0	Good Coal
459	462	Grey sandstone, hard.		464 - 472.5	Shale
462	474	Grey shale.	Seam 4	472.5 - 478	Sandstone
474	487	Grey sandstone, hard.		478 - 499	Coal
487	529	Grey shale.		493 - 495	Shale

40 Scale

Color Plot & Dips

Ore Classes & Aver.

270'

405'

529'

2507--N.D.N.

Core Size

4 1/2"

Hole No.

RH 78

Page

2

# Diamond Drill Geological Log



K- FROTHING 70(3)A-2

McAuley Drilling Co.

Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

Logged By: S.B. Butrenchuk Date: March, 1970 Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: Mt. Turnbull App. Bear: \_\_\_\_\_ App.: Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

**312**

From	To	Discard:	Reason:
0	14	Overburden	
14	21	Shale - hard	Revised by radiation log
21	35	Shale	
35	41	Coal	
41	85	Shale	
85	101	Gr. Shale	
101	106.5	Coal - at 103' - 0.5' of shale - at 104' - 0.4' of shale	
106.5	112.5	Gr. Shale - coal bands - at 110' - 0.6' coal	Seam 7 107 - 138 Good coal
112.5	143.5	Coal - at 142' - 0.3' shale	138 - 142 shale
143.5	218.5	Gr. Shale - at 146.8' - 0.5' coal	
218.5	239.5	Coal - at 230.8' - 0.5' shale - at 232.3' - 0.5' shale	217 - 231 Good to fair coal (228 - 231 fair)
239.5	251.3	Gr. Shale	Seam 5 231 - 234.0 Shale
251.3	254	Coal	234. - 236.0 Coal fair only
254	284	Gr. Shale - coal traces to 257'	
284	285.5	Coal	
285.5	328	Gr. Shale	
328	333	Gr. Sandstone - very hard	Core Size 4 1/2"
333	355	Gr. Sandstone - very hard	
355	370	Sandstone - very hard	
370	379	Sandstone - very hard	

**NOT SAMPLED  
- SINGLE WALL PIPE**

Hole No. RH 79 Page 1

Scale 20

Color Plot & Dips

Ore Classes & Aver.

254'

135'

2507-N.D.N.

# Diamond Drill Geological Log



McAuley Drilling Co.

Objective:

Sampled:

Logged By: S.B. Butrenchuk

Date: March, 1970

Composites:

Block:

Sect.:

Place: Mt. Turnbull

App. Bear:

App. Dip.:

Length:

From To Discard Reason:

From	To	Discard	Reason
379	431	Gr. Sandstone	378 - 385.0 Good Coal
431	442	Gr. Shale	Seam A 397 - 408 " " shale - s.s between
442	449	Gr. Sandstone	420.5 - 436.5 " " shaly siltstone between
			- 428.5 - 429.5 shale
		449' - end of hole	

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.

Core Size 4 1/2"

Hole No. RH 79

Page 2

# Diamond Drill Geological Log



McAULEY DRILLING COMPANY

Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_ **312**

Logged By: S.B. BUTRECHUK Date: MARCH, 1970 Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: GREENHILLS App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From	To	Discard:	Reason:
0	11	Clay and rocks - overburden.	
11	20	Fractured shale and sandstone.	
20	30	Shale.	<b>NOT SAMPLED - SINGLE WALL PIPE</b>
30	32	Gravel.	
32	45	Shale.	
45	50	Shale.	
50	53	Black shale.	42.5 - 48.5 Good coal F2 Seam upper type
53	55	Coal imbedded with shale.	
55	60	Sandstone.	
60	68	Black shale.	
68	72	Sandstone, very hard.	
72	75	Sandstone, very hard.	
75	80	Sandstone.	
80	86	Black shale.	
86	90	Black shale.	
90	104	Coal.	93.5 - 99.0 Good Coal F1
104	105	Coal imbedded with shale.	
105	120	Sandstone.	
120	130	Black shale.	
130	135	Coal.	129 - 151.0 Seam F good qual
135	150	Coal.	143 - 145.0 shale
150	155	Coal.	151 - 155.0 S.S.
155	157	Black shale.	

Core Size  
4 1/2"

Hole No. RH 84 Page 1

Scale \_\_\_\_\_

Color Plot & Dips \_\_\_\_\_ Ore Classes & Aver. \_\_\_\_\_



# Diamond Drill Geological Log



McAULEY DRILLING COMPANY

Objective:			Sampled:			40 Scale	
Logged By: S.B. BUTRENCHUK			Date: MARCH, 1970			Color Plot & Dips	
Block:			Place: GREENHILLS			Ore Classes & Aver.	
Sect.:			App. Bear:			270	
App. Dip.:			Length:				
From	To	Discard:	Reason:				
157	160	Coal imbedded with shale.	No				
160	165	Coal imbedded with shale.	No				
165	167	Shale.					
167	172.5	Sandstone.					
172.5	197	Shale.					
197	202	Sandstone.					
202	203.5	Shale.					
203.5	237	Sandstone.					
237	240	Sandstone.					
240	250	Sandstone, very hard.					
250	255	Sandstone.					
255	260	Sandstone.					
260	264	Shale.					
264	268	Shale.					
268	270	Sandstone.					
270	285	Sandstone.					
285	292	Sandstone.					
292	295	Carbonaceous shale.					
295	300	Shale.					
300	308	Sandstone.	Core Size				
308	322	Shale.	4 1/2"				
322	327	Sandstone.	Hole No.				
327	351.5	Shale.	RH 84				
						Page	
						2	

# Diamond Drill Geological Log



McAULEY DRILLING COMPANY

Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

Logged By: S.B. BUTRENUK Date: MARCH, 1970 Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: GREENHILLS App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From To Discard: Reason:

351.5	368	Sandstone.	
368	375	Sandstone.	
375	380	Sandstone.	
380	389	Sandstone, very hard.	
389	401	Sandstone.	
401	405	Sandstone.	
405	406	Sandstone.	
406	413	Shale.	
413	417	Coal like shale.	407 - 415.0 Coal, good quality Upper "E"
417	422	Coal.	422.0 - 430.0 Coal, part lower "E"
422	430	Shale.	
430	432.5	Coaly shale.	
432.5	483	Coal.	
483	505	Shale.	
505	507	Sandstone.	
507	510	Black shale.	
510	520	Black shale.	
520	525	Black shale.	
525	530	Black shale.	
530	533	Black shale.	
533	540	Black shale.	
540	545	Carbonaceous shale.	
545	547	Carbonaceous shale.	

Core Size  
4 1/2"

Hole No. Page  
RH 84 3

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.

# Diamond Drill Geological Log



McAULEY DRILLING COMPANY

40 Scale

Objective:

Sampled:

Color Plot & Dips

Ore Classes & Aver.

Logged By: S.B. BUTRENCHUK

Date: MARCH, 1970

Composites:

Block:

Sect.:

Place:

App. Bear:

App. Dip.:

Length:

From

To

Discard:

Reason:

547	575	Coal.	B
575	590	Black shale and sandstone.	
590	592.5	Sandstone.	
592.5	605	Coaly shale.	
605	627	Shale.	
627	630	Sandstone.	

Core Size

4 1/2"

Hole No.

RH 84

Page

4

# Diamond Drill Geological Log

McAuley Drilling Co.



K- FROING 70(3)A-2

20 Scale

Objective:

Sampled:

Logged By: W.E. Pearson

Date: March 1970

Composites:

**312**

Block:

Sect.:

Place:

Greenhills

App. Bear:

App. Dip.:

Length:

From	To	Discard:	Reason:
0	26	Overburden	21-26° Dirty Coal?
26	28	Black Shale	
28	31	Sandstone	
31	75	Shale	
75	76.5	Shaley Coal	
76.5	100	Sandstone	
100	103	Shale coal stringers	
103	120	Black Shale	
120	160	Sandstone Hard	
160	162	Shale coal stringers	
162	175	Sandstone	
175	180	Shale Coal Stringers	
180	188	Sandstone	
188	195	Black Shale	
195	203	Sandstone Hard	
203	205.5	Coal	199-201° Dirty Coal
205.5	214	Shale	
214	245	Sandstone	
245	253	Sandstone	
253	260	Sandstone	
260	271	Siltstone	
271	275	Siltstone	
275	278	Siltstone	

Revised by Gamma Ray-Neutron Log  
(0-505 ft.)

Hole No. RH 85 Elev. 5534.0  
 Lat. 491 552.1 Lon. 72.08 2  
 E.C.V. Til.  
 Top of E @ 5223.9 | 10'  
 Top of D @ 5197.9 | 10'  
 Top of C @ 5156.6 | 10'  
 Top of \_\_\_\_\_ @ \_\_\_\_\_ | \_\_\_\_\_'

**NOT SAMPLED**  
**SINGLE WALL PIPE**

Core Size 4 1/2"  
 Hole No. RH 85 Page 1

135'

# Diamond Drill Geological Log



McAuley Drilling Co.

20 49 Scale

Objective:

Sampled:

Logged By: **S.B. Butrenchuk**

Date: **March, 1970**

Composites:

Block:

Sect.:

Place:

**Greenhills**

App. Bear:

App. Dip.:

Length:

From	To	Discard:	Reason:
278	279.5	Siltstone	
279.5	282	Coal	<i>No</i>
282	285	Possible carbonate material - possible fault (SB) Shale	<i>Not evident on radioactive log.</i>
285	290	Siltstone	
290	292	Siltstone	
292	297	Black Shale	
295	302	Siltstone	
302	315	Sandstone	
315	339	Coal	<i>311-331 Actual, Seam E, good quality 314-331.0</i>
339	343	Shale	
343	358	Sandstone	
358	361	Shale	
361	372	Sandstone	
372	375	Sandstone	
375	379	Coal imbedded in Shale	
379	384	Coal imbedded in Shale	
384	385	Coal	<i>387-401.5 Good coal, seam "D"</i>
385	390	Black shale	<i>401.5-421.0 Shale</i>
390	393	Black Shale	<i>421-427.0 Coal, good - part "D"</i>
393	400	Coal	
400	405	Coal	
405	409	Coal	
409	410	Black Shale	

Core Size 4 1/2"

Hole No. RH 85

Page 2

405'

590

# Diamond Drill Geological Log



McAuley Drilling Co.

Objective:

Sampled:

Logged By: **W.E. Pearson & S.B. Butrenchuk**

Date: **March, 1970**

Composites:

Block:

Sect.:

Place:

**Greenhills**

App. Bear:

App. Dip.:

Length:

From

To

Discard:

Reason:

410	414	Coaly Shale	
414	420	Black Shale	
420	426.5	Black Shale	
426.5	430	Coal	} No 427-430 = Carbonaceous shale
430	439	Coal	
439	440	Black Shale	} No 434-438.0 - 1' - 11"
440	443	Black Shale	
443	446	Sandstone	
446	450	Sandstone	
450	458	Sandstone	
458	461	Sandstone	459-462.0 Fair coal
461	466	Black Shale	
466	472	Coal	No
472	480	Black Shale	
480	484.5	shale	
484.5	516.5	Sandstone - hard	

516.5 End of Hole

Core Size

4 1/2"

Hole No. RH 85

Page 3

40 Scale

Color Plot & Dips

Ore Classes & Aver.

# Diamond Drill Geological Log



K-FARROW 70(3)A-2

McAuley Drilling Co.

Objective:

Sampled:

312

Logged By: S.B. Butrenchuk

Date: March, 1970

Composites:

Block:

Sect.:

Place: Greenhills

App. Bear:

App. Dip.:

Length:

From To Discard: Reason:

0	8	Clay	
8	18	Gravel	
18	23	Clay	
23	32	Gravel	
32	40	Clay	
40	48	Gravel	
48	53	Clay	
53	53.5	Bedrock - sandstone	
53.5	60	Sandstone	
60	70	Sandstone	
70	80	Sandstone	
80	83	Black shale	
83	86	Coal imbedded in shale	
86	90	Black shale	
90	94	Coal	No
94	96	Coal imbedded in shale	
96	100	Coal	No
100	105	Black shale	
105	113	Sandstone	
113	133	Sandstone	
133	135	Siltstone	
135	165	Hard sandstone	
165	169	Sandstone	

Revised by Gorman Ray - Neutron Log (0-5350)

Hole No. RH 86 Elev. 5584.6  
 Lat. 49.251.4 Dep. 71.682.5  
 Elev. Th.  
 Top of E @ 5212.6 | 22.0'  
 Top of D @ 5122.6 | 32.0'  
 Top of lower D @ 5080.6 | 3.0'  
 Top of @ | ,

**NOT SAMPLED**  
**- SINGLE WALL PIPE**

40 Scale

Color Plot & Dips

Ore Classes & Aver.

Core Size 4 1/2"

Hole No. RH 86 Page 1

# Diamond Drill Geological Log



McAuley Drilling Co.

Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

Logged By: S.B. Butrenchuk Date: March, 1970

Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: **Greenhills** App. Bear: \_\_\_\_\_ App. Dip: \_\_\_\_\_ Length: \_\_\_\_\_

From	To	Discard:	Reason:
169	180	Siltstone - very hard	
180	182	Siltstone	
182	183	Siltstone	
183	200	Sandstone - very hard	
200	202.5	Sandstone	
202.5	211	Sandstone	
211	218	Siltstone - very hard	
218	219	Coal imbedded in shale	
219	225	Shale	
225	238	Shale	
238	269	Sandstone	
269	272	Shale	
272	276	Sandstone	
276	300	Sandstone	
300	315	Sandstone	
315	330	Sandstone	
330	332	Sandstone	
332	334.5	Shale	
334.5	375	Sandstone (fine)	
375	376.5	Shale	
376.5	377.5	Shaley Coal	<i>372-394.0 Coal, 'E' Seam</i>
377.5	405	Coal	<i>(372-76 poor quality) 384.5-390 shaly</i>
405	410	Coal (Carb. Shale)	<i>394-397.0 carbonaceous shale to shale</i>

Core Size 4 1/2"

Hole No. RH 86

Page 2



# Diamond Drill Geological Log



McAuley Drilling Co.

40 Scale  
Color Plot & Dip  
Ore Classes & Aver.

Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

Logged By: **W.E. Pearson** Date: **March, 1970** Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: **Greenhills** App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From To Discard: Reason:

410	420	Sandstone (fine grain)	
420	447	Black Shale	
447	453	Sandstone (hard)	
453	465	Black shale	<i>D" 462-494.0 Coal, shaly 476.5-478.5 excellent quality</i>
465	468	Shale coal stringers	
468	502.5	Coal	<i>(lower D) 494-504 s.s. 504-507.0 coal poor quality</i>
502.5	504.5	Shale	
504.5	548.5	Sandstone (fine)	
		End hole	

Core Size **4 1/2"**  
Hole No. **RH 86** Page **3**

# Diamond Drill Geological Log



K-FROING 70(3)A-2

Becker Drilling Co.

Objective:

Sampled:

312

Logged By: S.B. Butrenchuk

Date: March, 1970

Composites:

Block:

Sect.:

Place:

Greenhills

App. Bear:

App. Dip.:

Length:

From To Discard Reason:

0	10	Clay and rock					
10	26	Overburden					
26	110	Shale and sandstone - stringers of coal					
110	200	Hard sandstone - shale layers			Good Coal	166-173.5	E
200	219	Shale and sandstone					
219	248	Coal			Good Coal	220-247	E
248	272	Shale and sandstone - stringers of coal					
272	315	Coal			Good Coal	271-311	D
315	320	Shale and sandstone					
320	330	Hard sandstone					
330	340	Coal - layers of shale			Good Coal	330.5	338
340	350	Shale - coal stringers					
350	394	Sandstone					
394	400	Coal					
400	405	Very hard sandstone					

Revised Gamma Ray Log

Hole No. _____	Elev. _____
Lat. _____	Dep. _____
	Elev. Th.
Top of <u>F</u> @ <u>5216.5</u>	<u>7.5'</u>
Top of <u>E</u> @ <u>5252.5</u>	<u>27.0'</u>
Top of <u>Upper D</u> @ <u>5241.5</u>	<u>40.0'</u>
Top of <u>Lower D</u> @ <u>5182.0</u>	<u>7.5'</u>

405' End of hole

Core Size

4 1/2"

Hole No. RH 87

Page 1

40 Scale

Color Plot & Dip

Ore Grades & Ayr.

FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION		SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
219.0	248.0	Seam "E"	RAW COAL					0.6	32.7	20.0	46.7	2½, 2½, 2	0.27	
			CLEAN COAL					0.6	13.7	23.2	62.5	5.5, 5.5	0.40	69.2 % Recovery
272.0	305.0	Seam "D"	RAW COAL					0.4	19.2	21.3	59.1	2½, 2½, 3	0.30	
			CLEAN COAL					0.7	10.3	22.9	66.1	4, 4, 4½	0.32	73.4 % Recovery
305.0	330.0	Seam "Lower D"	RAW COAL					0.5	30.5	19.6	49.4	3, 3, 3	0.36	
315.0	340.0		CLEAN COAL					0.5	12.6	21.8	64.9	4, 3½, 4	0.50	57.2 % Recovery
394.0	400.0	Seam "C?"	RAW COAL					0.5	6.9	22.9	69.7	7, 7, 7	0.27	
			CLEAN COAL					0.75	7.4	22.5	69.3	6½, 7, 6½	0.3	95.0 % Recovery

# Diamond Drill Geological Log



K-FORING 7(3)A-2

ALPINE DRILLING COMPANY

Objective:

Sampled:

312

Logged By: S.B. BUTRENCHUK

Date: FEBRUARY, 1970

Composites:

Block:

Sect.:

Place:

S. GREENHILLS

App. Bear:

App.: Dip.:

Length:

From	To	Discard:	Reason:
0	17	Overburden, clay and gravel.	
17	57	Sandstone.	
57	69	Coal.	
69	80	Shale.	
80	173	Shale.	
173	185	Coal.	
185	280	Shale.	
280	285	Shale.	
285	340	Sandstone.	
340	360	Sandstone.	
360	380	Sandstone.	
380	386	Sandstone.	
386	470	Shale with sandstone stringers.	
470	475	Shale.	

**NOT SAMPLED  
- SINGLE WALL PIPE**

Note:- 470' of drill stem left in hole.

Core Size

Hole No.

R.H. 90

Page

1

40 Scale

Color Plot & Dips

Ore Classes & Aver.

# Diamond Drill Geological Log



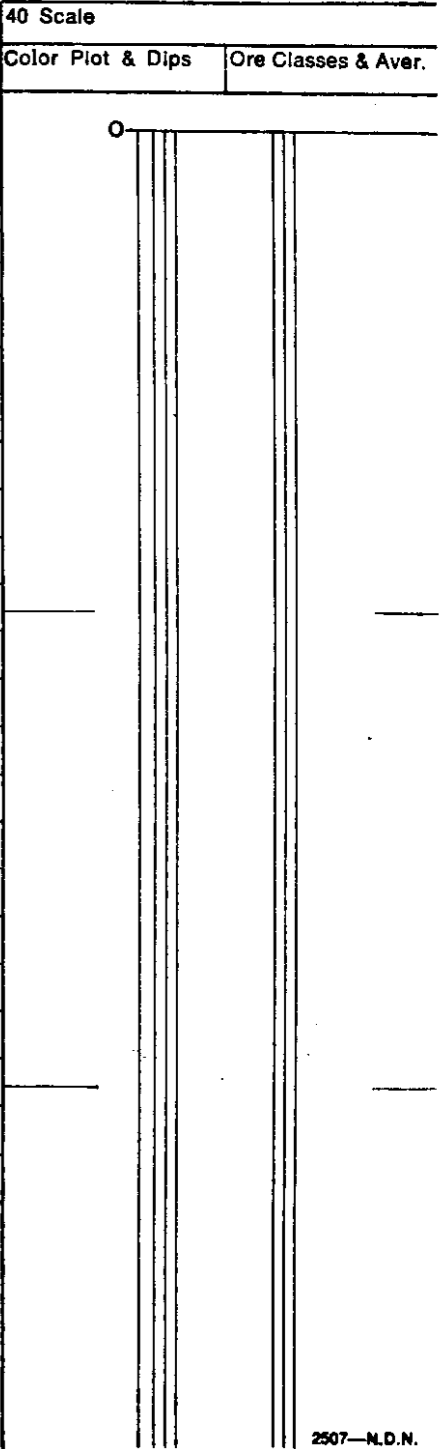
K - FARDING 70(3)A-2

Objective:	Sampled:	<b>312</b>	40 Scale
Logged By: <b>D. McFARLAND</b>	Date: <b>August 2, 1970</b>	Composites:	Color Plot & Dips    Ore Classes & Aver.

Block:	Sect.:	Place:	App. Bear:	App. Dip.:	Length:
--------	--------	--------	------------	------------	---------

From	To	Discard: Reason:
0	71	Overburden.
71	83	No core - a black coal sludge appeared in the mud tanks indicating that the drillers were triconing drilling in a coal seam.
83	96	Siltstone.
96	99.8	Sandstone and siltstone; flaser structure, crossbedded.
99.8	104.6	Sandstone; medium to coarse grain.
104.6	106	Siltstone.
106	141.9	Sandstone, coarse grain, mudclast, dip 20°; highly fractured and brecciated.
141.9	148.6	Fine grain sandstone and siltstone, flaser structure.
148.6	171.6	Sandstone, medium to coarse grain, mudclast; dip 10°, highly fractured and brecciated.
171.6	174.6	Sandstone, fine to medium grain.
174.6	192	Mudstone.
	192	End of hole, abandoned because rods continually sticking. Tricone plus one rod left in hole after attempting to clean out hole.

Core Size	HQ
Hole No.	91
Page	1



# Diamond Drill Geological Log



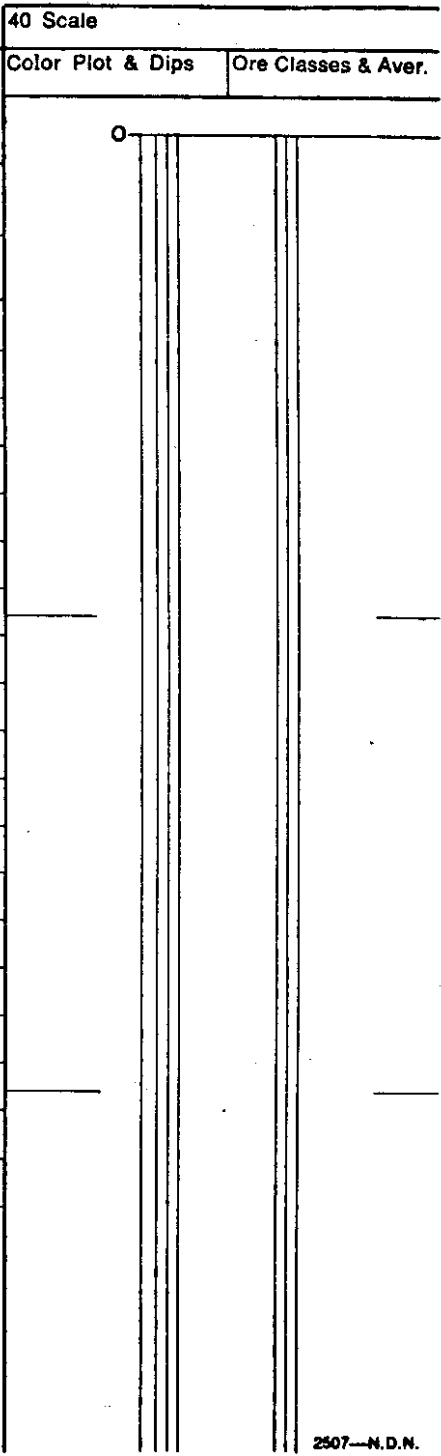
K. FROENK 70(3)A-2

Objective:	Sampled:	<b>312</b>	40 Scale
Logged By:	Date:	Composites:	Color Plot & Dips    Ore Classes & Aver.

Block:	Sect.:	Place:	App. Bear:	App. Dip.:	Length:
--------	--------	--------	------------	------------	---------

From	To	Discard:	Reason:
			<i>Revised by radiation log</i>
10	21	Fine grain sandstone and siltstone; flaser structure	
21	25.3	Sandstone, fine to medium grain, dip 20°, penecontemporaneous faulting	
25.3	37.3	Sandstone; coarse grain, mudclast, dip 25°, highly fractured	
37.3	39.7	Sandstone; fine to medium grain, thinly bedded, cross stratified	
39.7	60.9	Sandstone; coarse to very coarse grain, coalified wood fragments, mudclasts	
60.9	62.0	Mudstone	
62.0	62.5	Sandstone; fine grain	
62.5	63.2	Siltstone	
63.2	68.6	Siltstone and fine grain sand stone, flaser structure, dip 27°	
68.2	70.2	Siltstone	
70.2	83.8	Mudstone	
83.8	87.4	Coal	<i>Coal 80.0 - 91.5</i>
87.4	89.0	Sandstone, fine grain	
89.0	90	Mudstone	
90	91.7	Coal	
91.7	100	Mudstone; brecciated	
100	105.4	Sandstone, fine grain and siltstone; flaser structure; dip 30°	
105.4	137.1	Siltstone, sandy, hard	
137.1	138.3	Sandstone, fine grain	
138.3	140.5	Sandstone, fine grain	
140.5	141	Mudstone	
141	143.4	Sandstone, fine grain	
143.4	146.0	Siltstone	

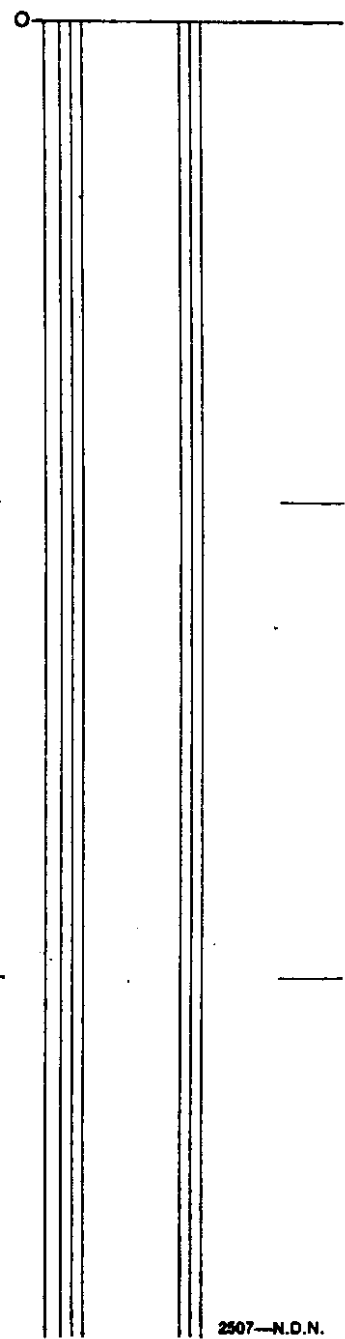
Core Size	EQ
Hole No.	DDH 92
Page	1



# Diamond Drill Geological Log



Objective:				Sampled:				40 Scale	
Logged By:				Date:				Color Plot & Dips	
Block:				Composites:				Ore Classes & Aver.	
Sect.:		Place:		App. Bear:		App. Dip.:		Length:	
From	To	Discard:		Reason:					
146.0	148.3			Sandstone, fine grain thinly bedded, cross laminae, lode casting, dip 33°					
148.3	152			Sandstone, siltstone, mudstone; thinly bedded, flaser structure					
152	160.8			Siltstone					
160.8	166			Sandstone, fine to very fine grain, massive to thinly bedded; dip 40°					
166	172			Siltstone, sandstone; flaser structure					
172	176			Siltstone					
176	194			Sandstone, siltstone; flaser structure; flame structures, lode casting dip 33°					
194	195.3			Siltstone					
195.3	196.6			Sandstone, fine grain					
196.6	198.3			Siltstone					
198.3	221			Sandstone, fine grain, thinly bedded, cross stratified, fractured.					
221	222.5			Siltstone					
222.5	223.8			Sandstone, medium grain, thinly bedded, dip 40°					
223.8	227.7			Siltstone					
227.7	224.2			Sandstone, fine grain, thinly bedded					
224	242.6			Sandstone and siltstone, flaser structure					
242.6	246			Siltstone, highly fractured					
246	252.4			Siltstone					
252.4	263.5			Coal <span style="float:right">250.0 - 260.0</span>					
263.5	267.3			Mudstone					
267.3	280.1			Coal <span style="float:right">264.0 - 279.0</span>					
280.1	322			Dark mudstone, several vitrain bands near the top of the unit					
				315' - 322' brecciated, dip 45°					
				Core Size		HQ			
				Hole No.		DDH 92			
				Page		2			



# Diamond Drill Geological Log



40 Scale

Objective:			Sampled:			Color Plot & Dips		Ore Classes & Aver.	
Logged By:			Date:			Composites:			
Block:		Sect.:	Place:		App. Bear:	App. Dip.:	Length:		
From	To	Discard:		Reason:					
322	344			Silty mudstone, current bedding, dip 37 to C.A					
344	359.5			Coal 9' recovered, 355-355.5 shale parting <span style="float: right;">348.0 - 356.0</span>					
359.5	395			Silty mudstone grading to a fine sandstone					
395	401			Coal, broken up 5 recovered <span style="float: right;">396.0 - 398.0</span>					
401	419			Mudstone, grading to siltstone and to mudstone					
419	423			Coal, poor cone 4 recovered <span style="float: right;">420.0 - 429.0</span>					
423	478.5			Alternating mudstone and siltstone, bedding varies 0° to 45° to C.A. current evidence. breccia 471 - 480					
480	501.2			Sandstone, medium grain, thinly bedded, dip 35° to C.A. 55 to horizontal, lode cast					
501.2	507.5			Siltstone					
507.5	510.6			Fine grain sandstone alternating with siltstone, flaser structure dip 44° to horizontal					
510.6	517			Siltstone grading to mudstone					
517	539			Coal <span style="float: right;">519.0 - 532.0</span>					
539	541			Mudstone					
541	544			Coal					
544	545.3			Mudstone					
545.3	545.6			Coal					
545.6	549.5			Mudstone with vitrain bands					
549.5	550.7			Coal					
550	558			Mudstone					
558	560			Coal					
560	566			Mudstone with vitrain bands					
566	574			Sandstone, medium grain thinly bedded					
574	578.5			Siltstone					
						Core Size			
						HQ			
						Hole No.		Page	
						92		3	



# Diamond Drill Geological Log



Objective:

Sampled:

Logged By:

Date:

Composites:

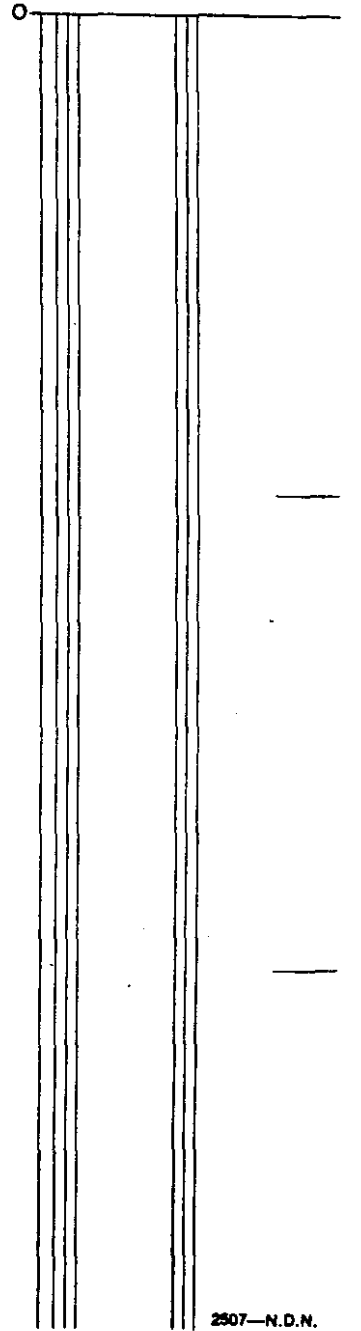
Block:                      Sect.:                      Place:                      App. Bear:                      App.: Dip.:                      Length:

From	To	Discard:	Reason:
578.5	579.8		Sandstone, fine to medium grain, dip 45°
579.8	584		Siltstone, vitrain band
584	588		Sandstone, highly fractured
588	592		Siltstone
592	652		Sandstone, few inter beds of siltstone 1" thick, brecciated from 606' to 652'
652	660.7		Fractured siltstone and mudstone
660.7	683		Coal <span style="margin-left: 100px;">656.0 - 679.5</span>
683	684		Mudstone breccia
684	686		Coal
686	688.1		Siltstone
688.1	689.1		Coal
689.1	690		Mudstone
690	691		Coal
691	692.2		Mudstone
692.2	692.6		Coal
692.6	693.1		Mudstone
693.1	694.6		Coal
694.6	738		Mudstone and siltstone, bottom 12' brecciated

738      End of hole

Core Size  
 HQ  
 Hole No. 92  
 Page 4

40 Scale  
 Color Plot & Dips      Ore Classes & Aver.



FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
83.8	91.7	Seam "Unknown"					0.7	59.4	14.4	25.5	3,3,3½	0.44	
		CLEAN COAL					0.5	8.5	27.3	63.6	9,9,8½	0.88	24.5 % Recovery
252.4	263.5	Seam "F"					0.7	17.6	23.3	58.4	5½,6,6	0.52	
267.3	280.1	CLEAN COAL					0.6	7.9	24.1	67.4	7,7,7½	0.55	89.5 % Recovery
344.0	359.5	Seam "Minor"					0.5	20.5	22.5	56.5	7,6½,6½	0.66	
		CLEAN COAL					0.6	7.5	24.5	67.4	7½,8,7½	0.80	71.4 % Recovery
395.0	401.0	Seam "Minor"					0.5	20.2	23.0	56.3	7,7,7	0.55	
		CLEAN COAL					1.4	8.2	25.2	65.2	8½,8½,8½	0.70	77.0 % Recovery
419.0	423.0	Seam "Minor"					0.6	71.6	12.8	15.0	1,1,1	0.66	
		CLEAN COAL					0.8	15.8	24.7	58.7	8,8,8½	1.3	13.5 % Recovery
517.0	550.7	Seam "VE"					0.2	49.5	16.2	34.1	1½,2,2½	0.36	
		CLEAN COAL					0.71	8.6	23.3	67.4	7,7½,7	0.58	40.7 % Recovery
660.7	694.6	Seam "D"					0.4	53.4	14.8	31.4	1½,2,2	0.41	
		CLEAN COAL					0.6	9.3	22.6	61.9	8,8,8	0.63	20.2 % Recovery

# Diamond Drill Geological Log



K-FORDING 70(3)A-2

## Becker Daily Drill Report

Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_ **312**

Logged By: J.D.D. Date: Sept. 9, 1970 Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From To Discard: Reason: *Revised by radiation log*

0	5	Overburden	
5	30	Coal (22' - 25' shale & coal)	9.0 - 30.0 parting 22.0 - 29.0
30	41	Shale	
41	44	Coal (No. carb shale)	
44	61	Shale	
61	86	Sandstone	
86	98	Coal	86.0 - 97.0
98	134	Sandyshale	
134	141	Sandstone	
141	165	Shale	
165	187	Coal	162.0 - 188.0
187	188	Shale	
188	205	Sandstone	
205	216	Shale	
216	222	Sandstone	
222	241	Shale	
241	247	Coal	238.0 - 247.5
247	250	Shale	
250	251	Coal	
251	287	Siltstone	
287	390	Sandstone	
390	401	Shale	
401	452	Coal	400.0 - 452.0

Core Size

Hole No. RH 94

Page 1

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION		SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
5.0	22.0	UPPER E	RAW COAL					2.4	26.8	20.2	50.6	ONA	.38	
			CLEAN COAL					2.0	12.3	22.5	66.5	1½, 1½, 1½	.48	Recovery 20.4%
25.0	30.0	UPPER F	RAW COAL					1.3	25.4	19.4	53.9	1, 1, 1	.49	
			CLEAN COAL					1.9	8.8	22.5	66.8	2½, 2½, 2½	.55	Recovery 39.6%
41.0	44.0	MINOR	RAW COAL					0.6	5.2	13.0	81.2	2, 2½, 2½	.49	
			CLEAN COAL					1.5	19.2	20.6	58.7	8½, 9, 8½	.74	Recovery 43.9%
86.0	98.0	LOWER E	RAW COAL					0.5	29.9	18.6	51.0	5, 5½, 5	.69	
			CLEAN COAL					0.7	12.8	22.5	64.0	8, 8, 8	.47	Recovery 64.8%
241.0	247.0	LOWER D	RAW COAL					0.4	24.8	21.1	53.7	5, 5, 4½	.44	
250.0	251.0		CLEAN COAL					0.5	14.6	22.2	62.6	5, 5½	0.51	Recovery 65.9%
401.0	430.0	B	RAW COAL					0.5	10.9	21.0	67.6	6, 6, 6	.47	
			CLEAN COAL					0.5	7.3	21.8	70.4	7½, 7½, 7½	.25	Recovery 92.8%
430.0	460.0	B	RAW COAL					0.5	10.9	21.0	67.6	6, 6, 6	.47	Recovery 91.5%
			CLEAN COAL					0.8	8.9	20.8	69.5	6, 5½, 5½	.28	

# Diamond Drill Geological Log



K-FORDING 70(3)A-2

## Becker Daily Drill Report

Objective:

Sampled:

312

Logged By: J.D.D.

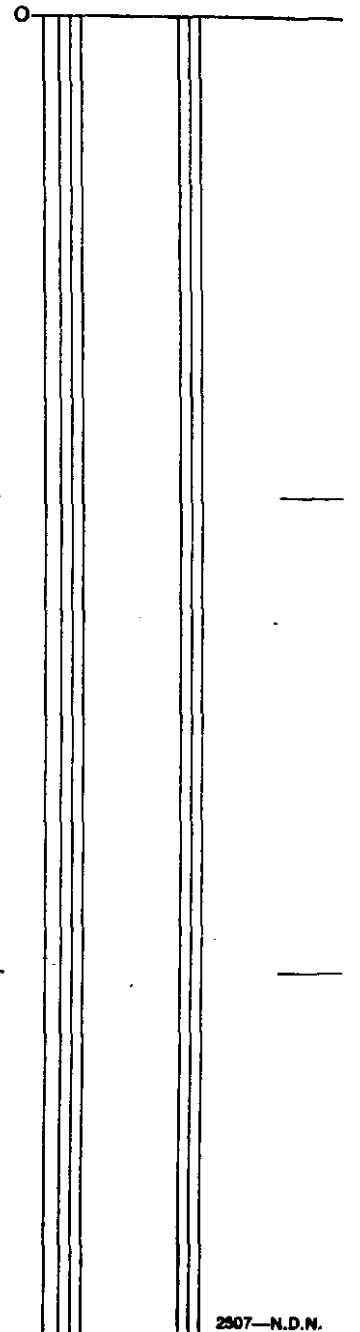
Date: Sept. 13, 1970

Composites:

Block:                      Sect.:                      Place:                      App. Bear:                      App.: Dip.:                      Length:

From	To	Discard:	Reason:
			<i>Revised by radiation log</i>
0	12	Overburden	
12	38	Shale	
38	46	Coal	4380                      40.0 - 46.0
46	48	Shale	
48	70	Sandstone	
70	75	Shale	
75	79	Coal	4381                      76.0 - 80.0
79	81	Shale	
81	97	Sandstone	
97	105	Shale	
105	259	Sandstone	
259	262	Shale	
262	272	Coal + Shale	4382 - 4384                      267.0 - 278.0
272	276	Sandstone	
276	280	Shale	
280	290	Coal + Shale	4385, 4386                      281.0 - 286.5
290	315	Sandstone	285.0 - 301.0
315	327	Shale	
327	338	Coal	4387 - 4391                      325.5 - 340.0
338	355	Shale	
355	373	Sandstone	
373	375	Shale	
375	384	Sandstone	

40 Scale  
Color Plot & Dips      Ore Classes & Aver.



Core Size

Hole No.

RH 95

Page

1

# Diamond Drill Geological Log



Becker Daily Drill Report

Objective:

Sampled:

40 Scale  
Color Plot & Dips Ore Classes & Aver.

Logged By: J.D.D.      Date: Sept. 13, 1970

Composites:

Block:      Sect.:      Place:      App. Bear:      App. Dip.:      Length:

From      To      Discard:      Reason:

384	393	Shale		
393	400	Sandstone		
400	401	Shale		
401	419	Sandstone		
419	424	Shale		
424	437	Coal	4392 - 4398	429.0 - 436.0
437	450	Shale	End of hole	

0	

Core Size

Hole No.      Page

RH 95      2

2507-N.D.N.

# Diamond Drill Geological Log



K- FACING 70(3)A-2

Beckers Drilling Co.

20 Scale

Objective:

Sampled: **312**

Logged By: S.B. Butrenchuk

Date: March, 1970

Composites:

Block: Sect.: Place: **Greenhills** App. Bear: App. Dip.: Length:

From	To	Discard:	Reason:
0	35	Clay and rock - sandstone boulders	
35	40	Shale	
40	110	Shale and hard sandstone	41-52.0 fair coal seam F?
110	140	Shale - coal stringers at 115'	
140	166	Coal	141-165.0 Actual "E" upper good qual.
166	168	Shale	165-169.0 shale
168	181	Coal	169.0 - 180 Coal / good quality lower "E"
181	190	Shale with coal stringers	
190	225	Hard sandstone - shale layers	
225	237	Shale	
237	254	Sandstone and shale - stringers of coal	
254	288	Coal	261-287.5 D good coal
288	306	Sandstone and shale - stringers of coal	278-280 shaly
306	310	Coal	
310	318	Sandstone and shale	287.5 - 300.0 s.s.
318	325	Coal	306-310 part "D" fair coal
325	330	Shale with coal stringers	318-324 "C" " "
330	355	Hard sandstone	
355	380	Very hard sandstone	
380	400	Hard sandstone	
400	414	Very hard sandstone	
414	428	Hard sandstone - coal 420' - 420.6'	
428	434	Shale and sandstone	

Core Size

4 1/2"

Hole No.

RE 97

Page

1

135'

270



# Diamond Drill Geological Log



Becker Drilling Co.

20 Scale

Objective:

Sampled:

Color Plot & Dips

Ore Classes & Aver.

Logged By: S.B. Butrenchuk

Date: March, 1970

Composites:

Block:

Sect.:

Place:

Greenhills

App. Bear:

App. Dip.:

Length:

From

To

Discard:

Reason:

434 457 Coal

433-456.0 V. good coal. "B"

457 460 Shale and sandstone

460' End of Hole

Hole No.		Elev.	5300.0
Lat.		Dep.	7000.0
		Elev.	Th.
Top of	A	@	5200.0   11.0" → No. 1
Top of	F	@	5190.0   36.0"
Top of	D	@	5360.0   21.0"
Top of	B	@	5188.0   23.0"

Core Size 4 1/2"

Hole No. RH 97

Page 2

405'

1967-N.D.N.

DIAMOND DRILL SAMPLING RECORD

GREEN HILLS

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
149	166	"E" Raw Coal Composite				0.5	30.8	20.4	48.3	4½,4½,4½	0.93	
169	181	Clean Coal Composite				0.6	10.4	22.9	66.2	7,6½,7	0.40	
254	288	"D" Raw Coal Composite				0.6	23.2	21.5	54.7	2,2,2½	0.33	
		Clean Coal Composite				0.7	10.5	21.2	67.6	3,3,3	0.36	
306	310	"D" Lower Raw Coal Composite				0.5	32.4	17.4	49.7	1,1,1	0.63	
		Clean Coal Composite				0.7	10.9	19.7	68.7	2½,3,2½	0.52	
318	325	"C" Raw Coal Composite				0.6	37.5	16.8	45.1	1,1,1	0.60	
		Clean Coal Composite				0.6	13.6	19.7	66.2	1½,1½,1	0.46	
434	457	"B " Raw Coal Composite				0.5	7.4	21.7	70.4	6,5½,6	0.96	
		Clean Coal Composite				0.8	6.5	21.3	71.3	4½,4,4½	0.31	

# Diamond Drill Geological Log



K - FACINGS 70(3)A-2

Becker Drilling Co.

20 Str Scale

Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

Logged By: **W.E. Pearson** Date: **March 1970** Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: **Greenhills** App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

**312**

From	To	Discard:	Reason:
0	27	Overburden	
27	40	Coal	5046 to 5048 <i>checks, Seam E, good quality.</i>
40	120	Shale and Sandstone	
120	133	Shale and Sandstone	
133	159	Coal	5049 to 5053 <i>"D" 133.5-160.0 Actual; Good Quality 147-149.5 shaly</i>
159	166	Shale	
166	170	Coal	5054 <i>167-171.5 Actual lower part D, fair quality</i>
170	180	Shale	
180	185	Coal	5055 <i>180-187.5 Actual seam C good coal</i>
185	220	Shale	
220	260	Sandstone Hard	
260	265	Shale	
265	290	Sandstone Hard	
290	292	Sandstone Hard	
292	344	Coal	5056 to 5066 <i>@ 291.0 Top of B</i>
344	355	Sandstone and Shale	Coal Stringers
355	370	Sandstone Hard	

*Revised by Gamma Ray - Neutron Log (0-295 ft.)*

Core Size **3-7/8"**

Hole No. **RH 98**

Page **1**

# Diamond Drill Geological Log

Becker Drilling Co.



20 Scale

Objective:

Sampled:

Logged By: S.B. Butrenchuk

Date: March 1970

Composites:

270

Block:

Sect.:

Place:

Greenhills

App. Bear:

App. Dip.:

Length:

From To Discard:

Reason:

Hole No.	<u>447</u>	Elev.	<u>1000.1</u>
Lat.	<u>33° 15' N</u>	Dep.	<u>72° 30' W</u>
		Elev.	Th.
Top of	@	<u>1000.1</u>	<u>1000.1</u>
Top of	@	<u>1000.1</u>	<u>1000.1</u>
Top of	@	<u>1000.1</u>	<u>1000.1</u>
Top of	@	<u>1000.1</u>	<u>1000.1</u>

Core Size

3-7/8"

Hole No. RH 98

Page 2

GREENHILLS

## DIAMOND DRILL SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
27	40	"E" Raw Coal Composite				0.4	27.3	20.1	52.2	5,5	0.57	
		Clean Coal Composite				0.8	9.2	22.3	67.8	7½,7	0.36	
133	159	"D" Raw Coal Composite				0.3	21.4	20.2	58.1	2½,3	0.30	
		Clean Coal Composite				0.65	9.9	20.9	68.5	3½,3½	0.30	
166	170	"D" Lower Raw Coal Composite				0.4	13.2	19.5	66.9	2½,2½	0.52	
		Clean Coal Composite				0.7	8.2	20.0	71.1	2½,2	0.36	
180	185	"C" Raw Coal Composite				0.5	17.2	20.2	62.1	3,3	0.52	
		Clean Coal Composite				0.7	10.6	20.4	68.2	3½,3½	0.43	
292	344	"B" Raw Coal Composite				0.4	14.1	20.6	64.9	3½,3,3	0.38	
		Clean Coal Composite				0.75	8.3	21.3	69.8	3,3½,3½	0.34	

GREENHILLS

## DIAMOND DRILL SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
27	40	"E" Raw Coal Composite				0.4	27.3	20.1	52.2	5.5	0.57	
		Clean Coal Composite				0.8	9.2	22.3	67.8	7½, 7	0.36	
133	159	"D" Raw Coal Composite				0.3	21.4	20.2	58.1	2½, 3	0.30	
		Clean Coal Composite				0.65	9.9	20.9	68.5	3½, 3½	0.30	
166	170	"D" Lower Raw Coal Composite				0.4	13.2	19.5	66.9	2½, 2½	0.52	
		Clean Coal Composite				0.7	8.2	20.0	71.1	2½, 2	0.36	
180	185	"C" Raw Coal Composite				0.5	17.2	20.2	62.1	3, 3	0.52	
		Clean Coal Composite				0.7	10.6	20.4	68.2	3½, 3½	0.43	
292	344	"B" Raw Coal Composite				0.4	14.1	20.6	64.9	3½, 3, 3	0.38	
		Clean Coal Composite				0.75	8.3	21.3	69.8	3, 3½, 3½	0.34	

# Diamond Drill Geological Log



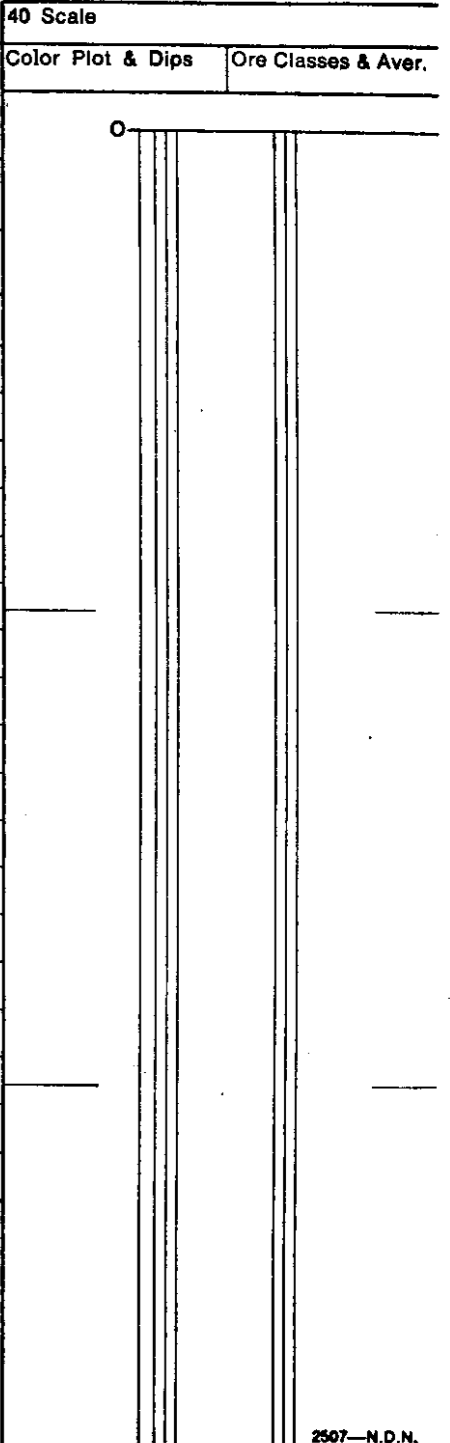
K-FORINGS 70(3)A-2

Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_ 312  
 Logged By: **DM** Date: **Aug. 23, 1970** Composites: \_\_\_\_\_  
 Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_  
 Color Plot & Dips \_\_\_\_\_ Ore Classes & Aver. \_\_\_\_\_

From	To	Discard:	Reason:
0	11	Overburden	
11	75	Shale	
75	98	Sandstone	
98	104	Coal and shale	100.0 - 105.0
104	107	Shale	
107	119	Coal and sandy shale	108.0 - 118.0
119	156	Shale, coal partings	119 - 140, sandy shale 140 - 156
156	178	Sandstone	
178	180	Shale	
180	204	Coal	
204	210	Shale	
210	245	Sandy shale	
245	255	Shale	
255	262	Coal	254.0 - 262.0
262	267	Shale	
267	271	Coal	267.0 - 272.0
271	277	Shale	
277	279	Coal	276.5 - 280.0
279	290	Shale	

290° End

Core Size \_\_\_\_\_  
 Hole No. **RE 99** Page **1**



FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
100.0	105	Seam "E" RAW COAL					0.8	43.9	15.2	40.1	2½, 2½, 2	0.38	
108	118	CLEAN COAL					0.3	11.3	22.7	65.7	7½, 7½, 7½	0.70	36.1 % Recovery
180	204	Seam "D" RAW COAL					0.7	22.2	18.5	58.6	3, 3, 3	0.27	
		CLEAN COAL					0.6	11.2	21.1	67.2	4, 4, 4	0.47	74.6 % Recovery
254	272	Seam "Lower D" RAW COAL					0.7	29.7	18.5	51.1	3, 3, 2½	0.49	
277	280	CLEAN COAL					0.5	13.2	21.0	65.3	4½, 4, 4½	0.54	66.0 % Recovery



# Diamond Drill Geological Log



K-FARROWING 70(3)A-2

BECKER DRILLING COMPANY

312

Objective:

Sampled:

Logged By: S.B. BUTRENCHUK

Date: MARCH, 1970

Composites:

Block:

Sect.:

Place: GREENHILLS

App. Bear:

App. Dip:

Length:

From	To	Discard:	Reason:
0	16	Sandstone.	
16	60	Coal.	19-59.0 indicated, shale 29-30 & 43-45 } Fair to Good quality } E"
60	80	Shale and sandstone - stringers of coal.	
80	153	Hard sandstone - shale layers.	
153	181	Coal.	D" { 152.0 - 182.0 V. good coal, 169-171.0 shale } 187 - 192.0 Good coal
181	188	Shale.	
188	192	Coal.	
192	195	Shale.	
195	203	Shale and sandstone.	
203	210	Coal.	203.5 - 210.0 Seam "C", good quality
210	260	Sandstone, coal stringers.	
260	280	Hard sandstone, shale layers.	
280	295	Hard shale, sandstone layers.	
295	305	Shale.	
305	318	Coal.	305.5 - 318.0 Seam "B", shale 309.5 - 311.5
318	335	Shale.	good qual coal.
335	340	Sandstone.	
	340	End of hole.	

Scale

Color Plot & Dips

Ore Classes & Aver.

2507 N.D.N. 270

Core Size

3 7/8"

Hole No.

RH 100

Page

1

GREENHILLS

## DIAMOND DRILL SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
16	60	"E" (Actually Shale 16-19)										
		Raw Coal Composite				1.6	29.8	18.5	50.1	2½,3	0.44	
		Clean Coal Composite				1.2	9.2	23.0	66.6	5,5	0.38	
153	181	"D" Raw Coal Composite				0.7	20.9	19.0	59.4	4,4½	0.30	
		Clean Coal Composite				0.50	8.2	22.2	69.1	6,6½	0.37	
203	210	"C" Raw Coal Composite				0.8	42.8	16.2	40.2	1,1	0.38	
		Clean Coal Composite				0.5	12.7	20.4	66.4	3,3½	0.49	
305	318	"B" Raw Coal Composite				0.7	12.6	22.0	64.7	7,7½7½	0.55	
		Clean Coal Composite				0.5	7.6	21.0	70.9	4,4,3½	0.36	

# Diamond Drill Geological Log



K-FORGING 70(3)A-2

Objective: **BECKER DRILL LOG (Redrill)**

Sampled:

**312**

Logged By: **W.E. PEARSON**

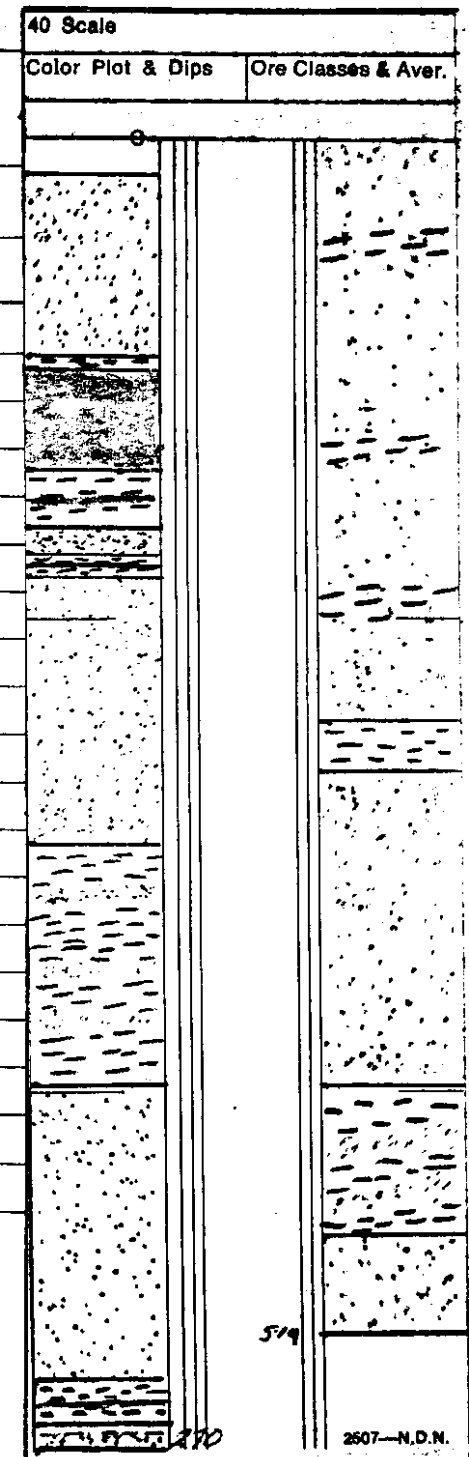
Date:

Composites:

Block: Sect.: Place: App. Bear: App.: Dip.: Length:

From	To	Discard:	Reason:
0	12	Broken shale and sandstone.	
12	45	Sandstone.	
45	47	Black shale.	
47	68	Coal.	48.5-66.0 Coal, 58.5-60.0 shale
68	80	Shale coal stringers.	66-69.0 Shale 69-74.
80	85	Sandstone.	
85	90	Shale coal stringers.	87-92
90	145	Sandstone.	
145	195	Shale and sandstone.	
195	255	Sandstone.	
255	365	Shale coal stringers.	
365	390	Sandstone and shale.	
390	400	Shale.	
400	410	Hard sandstone.	
410	420	Hard sandstone.	
420	465	Hard sandstone.	
465	495	Hard shale and sandstone, coal stringer at 488 feet.	
495	514	Sandstone, very hard.	

Hole No. 102 Elev. 6100  
 Lat. 49° 20' N Dep. 70°  
 Elev. Th.  
 Top of 9 @ 6100  
 Top of 5 @ 6100  
 Top of     @      
 Top of     @    



Core Size

R.H. 102

Hole No.

R.H. 102

Page

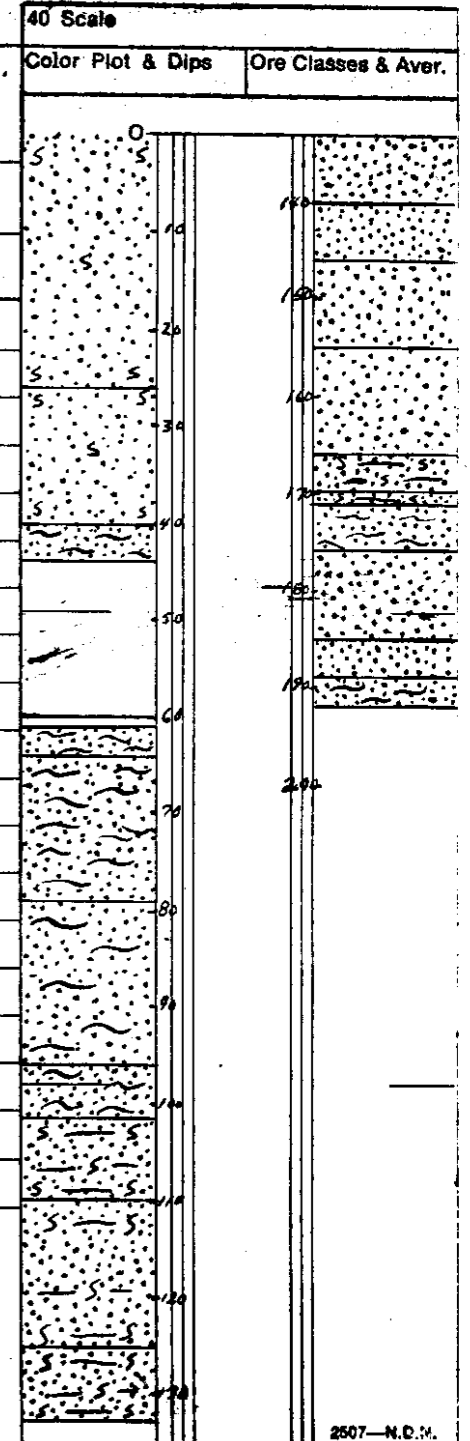
1

519

# Diamond Drill Geological Log



Objective:			Sampled:		
Logged By: T.D. GARROW		Date: OCTOBER 7, 1969		Composites:	
Block:	Sect.:	Place:	App. Bear:	App.: Dip.:	Length:
From	To	Discard:	Reason:		
0	26		Silty sandstone with siltstone and sandstone partings. Thin bedded. Dip angle 24°.		
26	40		Silty sandstone tending to siltstone thin bedded, dip angle 28°.		
40	44		Siltstone? 3.5' core short.		
44	60		Clarain, clarodurain, minor vitrain and bone coal. #2933 = 44-54.5. #2934 = 54.5 - 61.		
60	61		Bone coal.		
61	64		Siltstone, 1/4" coal partings. 3' core short.		
64	79		Siltstone. 6" of poor bone coal at 63' and 71'.		
79	95		Siltstone, 1/2" coal partings. Dip angle 26°. 2' core short.		
96	101.6		Siltstone, no coal partings, but carbonaceous.		
101.6	110		Sandy siltstone, thin bedded 20°.		
110	125		Sandy siltstone, several 3 to 4" sandstone and siltstone partings.		
125	133		Sandy siltstone, thin bedded 53°?		
133	140		Sandstone, thin bedded, one 2" siltstone.		
140	146		Sandstone, thin bedded, dip angle 18°.		
146	155		Sandstone with numerous coal partings.		
155	166.6		Sandstone with numerous coal partings.		
166.6	170		Sandy siltstone, thin bedded, slightly contorted, numerous coal partings. 1' core short.		
170	171		Sandy siltstone, thin bedded, slightly contorted.		
171	176		Siltstone.		
176	185		Sandstone, medium grain, thin bedded, sparse coal partings. 1' core short.		
185	189		Sandstone, medium grain, numerous coal partings, one 4" siltstone.		
189	192		Siltstone.		



Core Size  
H.Q.

Hole No. 102

Page 1

# Diamond Drill Geological Log



Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

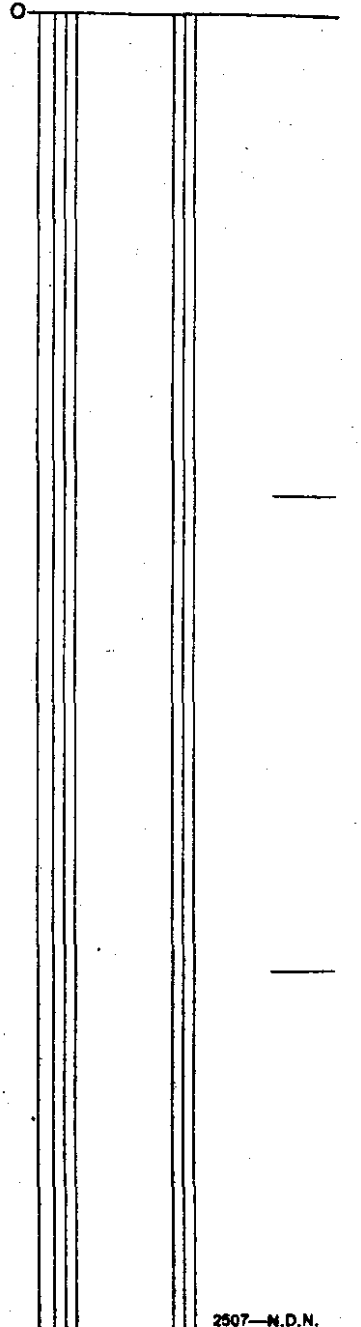
Logged By: T.D. GARROW Date: OCTOBER 10, 1969 Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App.: Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From To Discard: Reason:

192	196	Sandstone, coal partings.
196	196.6	Sandstone, coal partings.
196.6	198	Silty sandstone, thin bedded, dip angle 30°. Sparce coal partings.
198	208.5	Silty sandstone, thin bedded, dip angle 30°. Sparce coal partings.
208.5	223.5	Sandstone, medium grained, thin bedded. Dip angle 20°. Sparce coal partings.
223.5	238	Sandstone, medium grained, thin bedded, Dip angle 30°. Sparce coal partings. Minor pyrite.
238	241	Sandstone, medium grained, thin bedded. Dip angle 30°. Sparce coal partings.
241	247.5	Sandstone, medium grained, thin bedded. Dip angle 30°. Numerous coal lenses and 1/2 to 1 inch coal partings.
247.5	253	Sandstone, medium grained, thin bedded, very sparce coal partings.
253	267	Silty sandstone, thin bedded. Dip angle 25°. Very sparce coal partings.
		End of Hole.

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



Core Size  
H.Q.

Hole No. 102 Page 2

FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
47	50	Coal Chip Samples	2024										
50	55	Coal	2025										
55	60	Coal	2026										
60	65	Coal	2027										
65	70	Coal	2028										
47	70	Seam 9 Raw Coal Composite					1.7	22.9	19.7	55.7	1 1/2, 2, 2	0.47	
		Clean Coal Composite					1.0	7.4	15.8	73.4	1 1/2, 1 1/2, 2	0.43	

**FORDING OPERATIONS**  
**DRILL HOLE SAMPLING RECORD**

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
44.5	54.5	Clarain and clarodurain, minor vitrain	2933	613		10	.87	23.0	23.3	52.83	1½, 1, 1½	.47	Seam 9
54.5	61	Clarain and clarodurain, minor vitrain	2934	612		6.5	.66	58.2	13.7	27.44	N.A.	.49	

# Diamond Drill Geological Log



K-FARINE 70(3)A-2

Objective: McAULEY DRILL LOG

Sampled:

Logged By: W.E. PEARSON

Date: JANUARY 22, 1970

Composites:

**312**

Block: Sect: Place: App. Bear: App. Dip: Length:

From	To	Discard:	Reason:
0	13	Overburden. 5 inch casing.	0-20 feet, left in.
13	39.5	Grey shale.	
39.5	41	Coal and shaley coal.	37.0 - 51.0
41	57.5	Coal. (Trace of shale 49 to 50 feet, 52 to 54 feet.)	
57.5	59.1	Grey shale.	
59.1	59.9	Coal.	57.5 - 60.0
59.9	60.5	Grey shale.	
60.5	63.0	Coal.	
63	66	Shale, coal stringers.	
66	73	Coal, shale stringers.	
73	80	Grey shale.	74.0 - 78.5
80	82.6	Carbonaceous shale.	
82.6	89.4	Shale.	
89.4	96.8	Coal.	89.0 - 94.5
96.8	99	Dark shale.	
99	120	Dark shale.	
120	123	Dark shale.	
123	129.6	Carbonaceous shale.	
129.6	135	Shale.	
135	137	Sandstone.	
137	150	Shale	
150	165	Sandstone	
165	270	Shale	Coal 267 - 270.0

**NOT SAMPLED  
- SINGLE WALL PIPE**

Core Size

CHIPS: 0-20', 6 1/8" Hole  
Rest - 4 1/2" Hole

Hole No.

R.H. 119

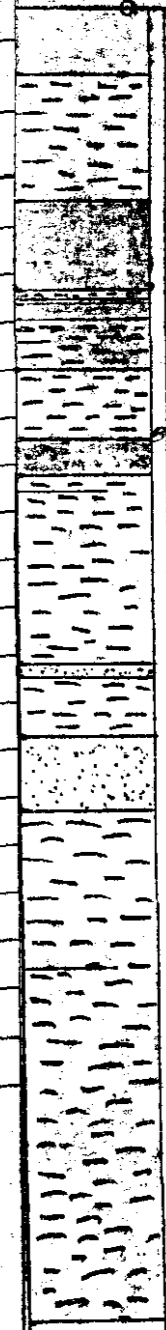
Page

1

40 Scale

Color Plot & Dips

Ore Classes & Aver.





# Diamond Drill Geological Log



Objective: McAULEY DRILL LOG

Sampled:

Logged By: W.E. PEARSON

Date:

Composites:

Block:                      Sect.:                      Place:                      App. Bear:                      App. Dip.:                      Length:

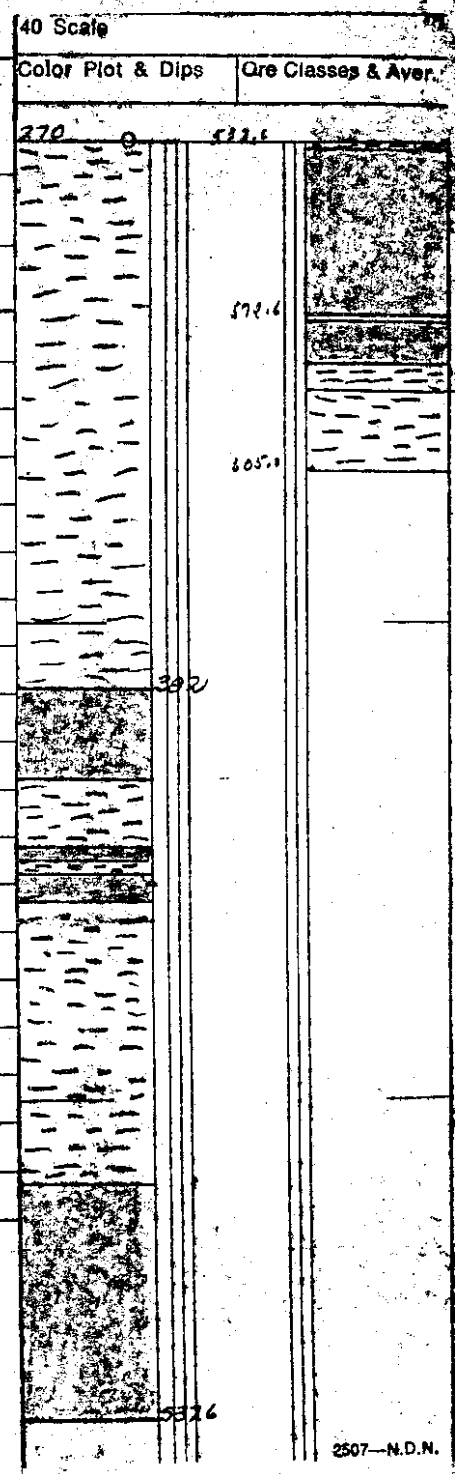
From      To      Discard:                      Reason:

270	280	Shale	
280	382.5	Shale	372.0 - 391.0
382.5	401	Coal. Shale stringers	393 to 398.5 feet.
401	414.5	Shale.	
414.5	417	Shale, coal stringers.	
417	420.5	Shale	
420.5	426.5	Coal, shale stringers.	
426.5	484	Shale	
484	537.6	Coal	Coal 478.0 - 540.0
537.6	538.8	Shale	
538.8	572.6	Coal	
572.6	575	Shale	
575	582	Coal	
582	587	Shale	
587	591	Carbonaceous shale.	
591	595.5	Shale.	
595	597.5	Carbonaceous shale. Coal traces.	
597.5	605	Shale.	

Abandoned Hole.

Core Size

Hole No. R.H. 119                      Page 2



# Diamond Drill Geological Log



K-FARROW 70(3)A-2

McAULEY DRILL LOG

Objective:		Sampled:	
Logged By: W.E. PEARSON	Date: JANUARY, 1970	Composites:	
Block:	Sect.:	Place:	App. Bear:
			App. Dip.:
			Length:

312

From	To	Discard:	Reason:
0	23.5	Overburden.	
23.5	30.0	Soft coal.	
30.0	89.	Sandstone.	
89.	90.	Coal and shale.	88.0 - 99.0
90.	93.	Grey sandstone.	Parting 90.0-93.0
93.	103.	Coal.	
103.	107	Grey shale.	
107	114.8	Grey sandstone.	
114.8	124.5	Coal.	
124.5	184.	Sandstone.	
184.	188.	Shale.	
188.	195.	Carbonaceous shale.	
195.	211.5	Sandy shale.	
211.5	213	Grey sandstone.	
213	225.	Sandy shale. Few sandstone bands.	
225.	345.	Grey sandstone. Fractured.	
345.5	346.5	Brown shale and coal.	345.0 - 390.0 parting 380.0 - 382.5
346.5	349.5	Grey sandstone.	
349.5	387.	Coal.	
387.	394.	Coal.	
394.	404.	Grey shale.	
404.	430.	Sandstone.	
430.	492.	Sandstone.	

*Revised by radiation log*

40 Scale

Color Plot & Dips      Ore Classes & Aver.

404

1970

2507-N.D.N.

Core Size	
Hole No.	R.H. 120
Page	1

# Diamond Drill Geological Log

Page - two

McAULEY DRILL LOG



Objective:

Sampled:

Logged By: W.E. PEARSON

Date: JANUARY, 1970

Composites:

Block:

Sect.:

Place:

App. Bear:

App. Dip.:

Length:

From To Discard: Reason:

492.	493.5	Grey, brown shale.	
493.5	497.5	Coal.	
497.5	501.	Shale.	
501.	508	Sandstone.	
		End of Hole.	

40 Scale

Color Plot & Dips

Orb Classes & Avar

Core Size

Hole No.  
R.H. 120

Page  
2

# Diamond Drill Geological Log



K-FACING 70(3)A-2

Objective: **McAULEY DRILL LOG**

Sampled:

**312**

Logged By: **W.E. PEARSON** Date:

Composites:

Block: Sect.: Place:

App. Bear: App. Dip.: Length:

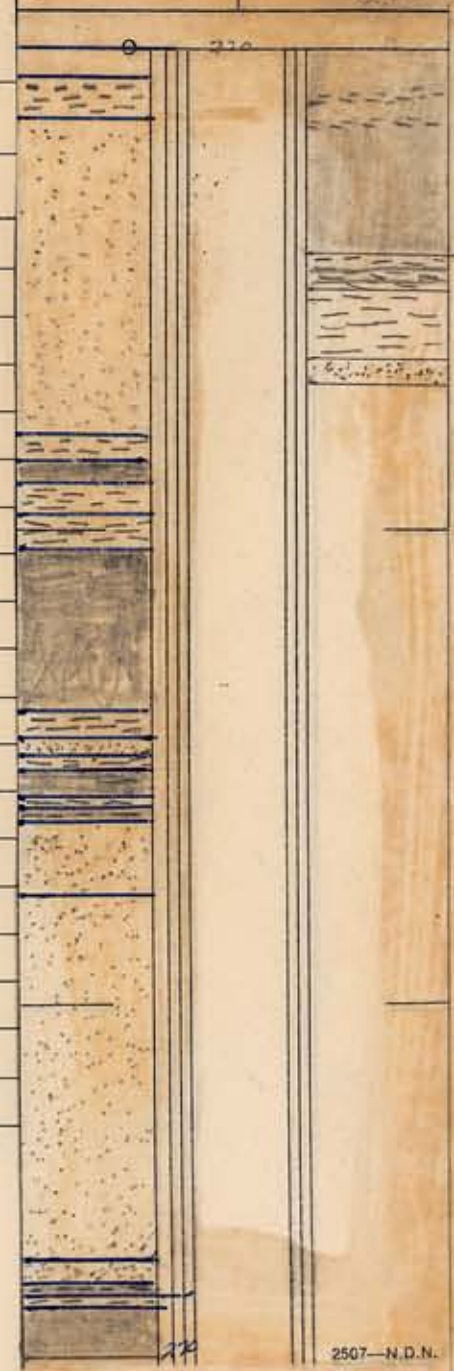
From To Discard: Reason:

*Revised by radiation log*

0	6	Overburden.
6	14	Grey shale. Limestone bands, very hard.
14	80	Sandstone.
80	85.4	Shale.
85.4	89	Coal. <i>82.0 - 85.0</i>
89	97	Shale.
97	104	Carbonaceous shale.
104	137	Coal. <i>99.0 - 133.0</i>
137	143	Shale.
143	146	Sandstone.
146	149	Carbonaceous shale.
149	155	Coal.
155	157	Carbonaceous shale.
157	160	Coal and shale stringers.
160	175	Sandstone.
175	225	Grey sandstone.
225	254	Sandstone, hard.
254	257	Coal, interbedded shale. <i>252.0 - 308.0</i>
257	259.2	Grey shale, thin coal partings.
259.2	312.5	Coal, thin shale bands. 281 to 285.
312.5	319	Shale, interbedded coal.
319	334	Grey shale.
334	338	Grey sandstone, very hard.

**NOT SAMPLED  
- SINGLE WALL PIPE**

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



Core Size

Hole No.

R.H. 121

Page

1

# Diamond Drill Geological Log



Objective: **McAULEY DRILL LOG**

Sampled: **S/A**

Logged By: **W.E. PEARSON** Date:

Composites:

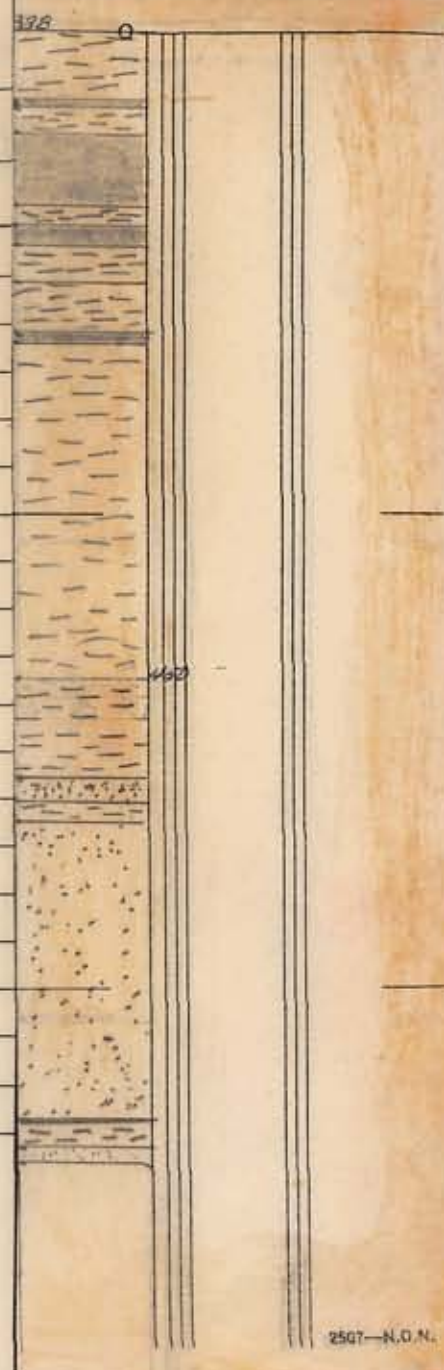
Block: Sect.: Place: App. Bear: App.: Dip.: Length:

From To Discard: Reason:

#338	353.5	Grey shale, thin coal bands.	342.0 - 382.0
353.5	354.3	Coal, not sampled.	
354.3	359.5	Grey shale.	
359.5	374.5	Coal, few traces shale, shaley below 371.5 feet.	
374.5	378.8	Grey shale, thin coal bands.	
378.8	382.8	Coal.	
382.8	390	Grey shale.	
390	400	Shale, soft.	
400	402	Coal.	
402	405	Shale.	
405	420	Shale, soft.	
420	435	Shale, hard.	
435	450	Shale, hard.	
450	472	Sandy and grey shale.	
472	476	Grey sandstone.	
476	480	Grey shale.	
480	492	Grey sandstone.	
492	540	Sandstone.	
540	542	Black and white sandstone.	
542	547.5	Grey shale.	
547.5	550	Grey sandstone.	

Core Size  
Hole No. **R.H. 121** Page **2**

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



# Diamond Drill Geological Log

McAULEY DRILL LOG



K-FORDING 70(3)A-2

Objective:

Sampled:

**312**

Logged By: S. BUTRENCHUK Date: FEBRUARY, 1970

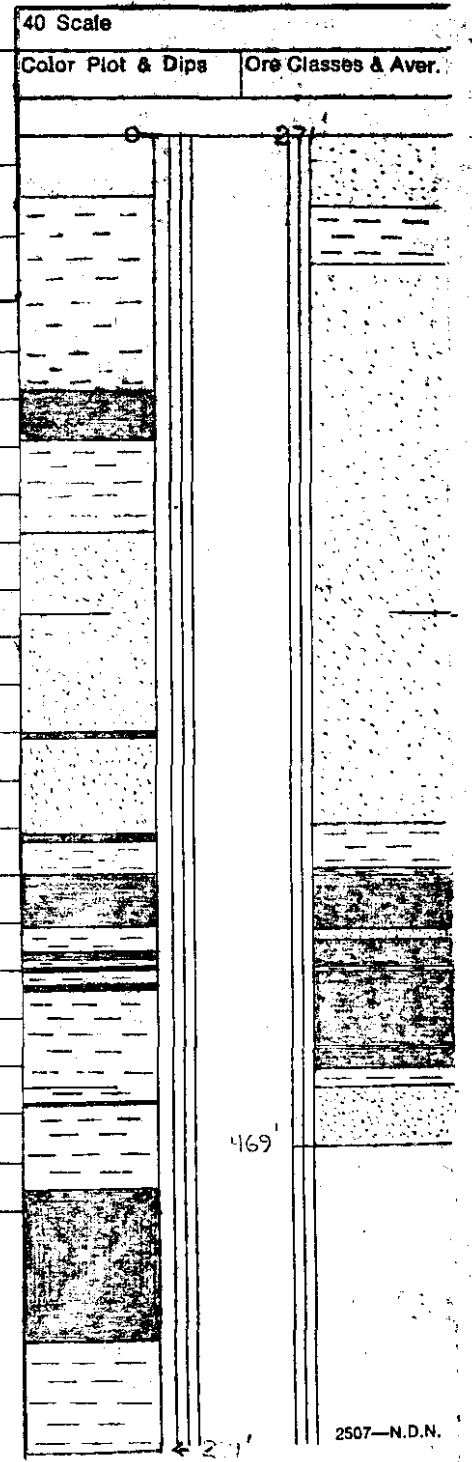
Composites:

Block: Sect.: Place: App. Bear: App.: Dip.: Length:

From To Discard: Reason: *Revised by radiation log*

0	12	Clay and rocks.
12	20	Grey shale.
20	40	Grey shale - water at 40 feet.
40	45	Grey shale - very hard.
45	50.5	Brown shale.
50.5	52	Carbonaceous shale.
52	63	Coal. <i>52.0 - 58.0</i>
63	82	Shale.
82	118	Sandstone, very hard.
118	123	Grey sandstone, hard.
123	124	Coal.
124	143.5	Grey sandstone, hard.
143.5	145	Coal.
145	152	Grey shale, thin coal bands, at 149.5 feet - 0.5 feet coal.
152	162.5	Coal. <i>Coal 150.0 - 153.0</i>
162.5	167.8	Grey shale, coal stringers.
167.8	169.8	Coal.
169.8	171.3	Grey shale.
171.3	172	Coal.
172	175	Grey shale.
175	176	Coal.
176	199.5	Grey shale.
199.5	200	Coal.

**NOT SAMPLED  
- SINGLE WALL PIPE**



Core Size

Hole No.

R.H. 122

Page

1

# Diamond Drill Geological Log

McAULEY DRILL LOG



Objective:

Sampled:

Logged By: S. BUTRECHUK

Date: FEBRUARY, 1970

Composites:

Block:

Sect.:

Place:

App. Bear:

App.: Dip.:

Length:

From	To	Discard:	Reason:
200	217	Grey shale.	214.0 - 235.0
217	248	Coal - 0.5' shale band at 237.8'. Few thin shale bands below 242 feet.	242.0 - 244.0
248	271	Grey shale.	
271	276	Grey sandstone, very hard.	
276	277	Sandstone.	
277	278	Sandstone.	
278	284	Black shale, hard.	
284	323	Sandstone.	
323	326	Sandstone, very hard.	
326	343	Grey sandstone, very hard.	
343	360	Sandstone.	
360	372	Sandstone, very hard.	
372	397	Grey sandstone, very hard.	
397	403	Sandstone.	
403	412	Shale.	
412	412.4	Coal.	407.0 - 438.0
412.4	413	Shale.	
413	423.8	Coal.	
423.8	425.4	Sandstone, soft.	
425.4	432	Coal.	
432	433	Shale.	
433	449	Coal.	
449	449.2	Shale.	

Core Size

Hole No.

R.H. 122

Page

2

40 Scale

Color Plot & Dips

Ore Classes & Aver.

# Diamond Drill Geological Log

McAULEY DRILL LOG



40 Scale

Objective:

Sampled:

Color Plot & Dips    Ore Classes & Aver.

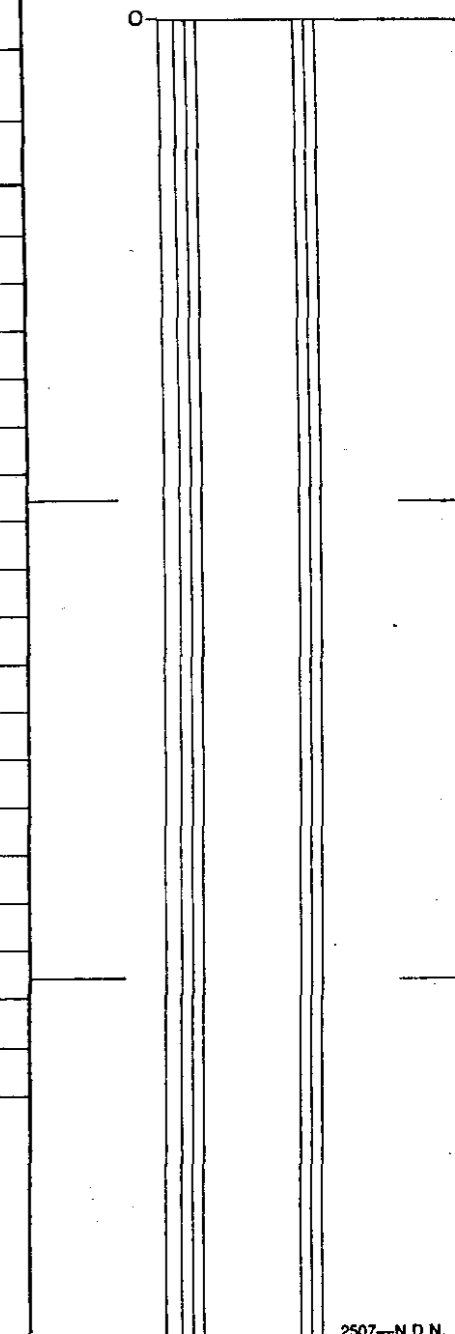
Logged By: S. BUTRENCHUK

Date: FEBRUARY, 1970

Composites:

Block:                                  Sect.:                                  Place:                                  App. Bear:                                  App.: Dip.:                                  Length:

From	To	Discard:	Reason:
449.2	453	Coal.	451.0 - 457.0
453	457	Shale.	
457	469	Sandstone.	
		End of Hole.	



Core Size

Hole No.

Page

R.H. 122                                  3



# Diamond Drill Geological Log



K-FOREING 70(3)A-2

McAULEY DRILLING COMPANY

Objective:

Sampled: **312**

Logged By: S. BUTRENCHUK Date: FEBRUARY, 1970

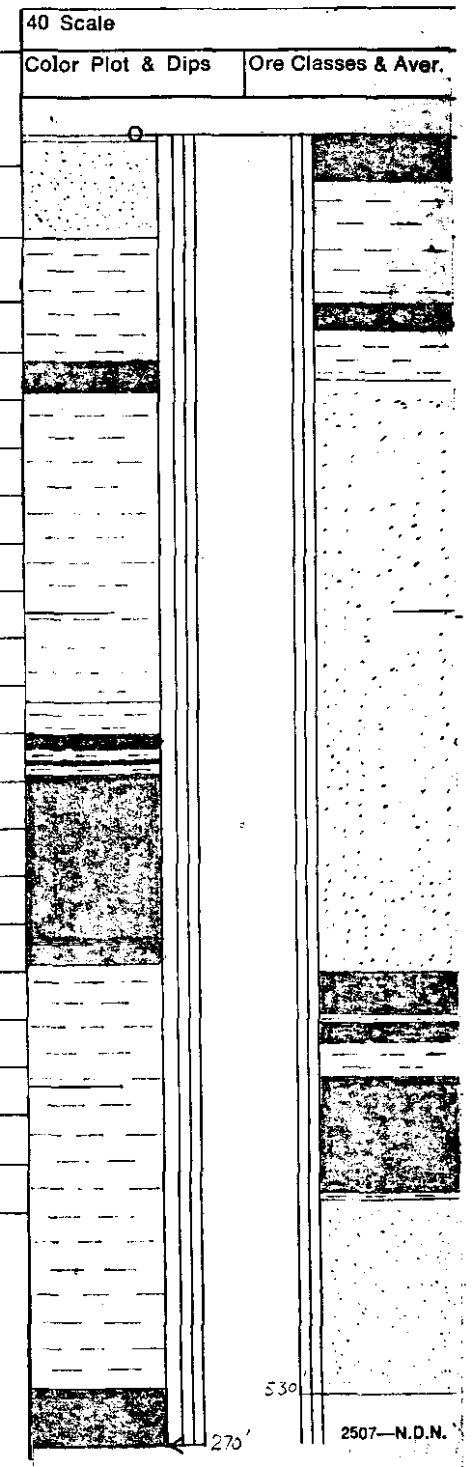
Composites:

Block: Sect.: Place: App. Bear: App. Dip.: Length:

From To Discard: Reason: *Revised by Radiation log*

0	1	Clay and rocks.	
1	21.3	Grey sandstone, hard.	
21.3	46.5	Grey shale.	
46.5	52.8	Coal.	46.0 - 50.0
52.8	117	Grey shale, few hard bands.	
117	123	Shale.	
123	126.3	Coal.	120.0 - 123.0
126.3	129	Shale.	
129	130	Coal.	
130	132	Shale.	130.0 - 163.0
132	166	Coal.	
166	166.2	Shale.	
166.2	170.4	Coal.	
170.4	258	Shale.	
258	279.6	Coal.	252.0 - 276.0
279.6	280	Shale.	277.0 - 280.0
280	286	Carbonaceous shale.	
286	293	Black shale.	286.0 - 288.0
293	300	Shale.	
300	305	Grey shale.	
305	310.3	Coal, few shale traces.	
310.3	321	Grey shale.	
321	396	Grey sandstone, hard.	

**NOT SAMPLED**  
**- SINGLE WALL PIPE**



Core Size  
Hole No. R.H. 123  
Page 1

# Diamond Drill Geological Log

McAULEY DRILLING COMPANY



40 Scale

Objective:

Sampled:

Color Plot & Dips

Ore Classes & Aver.

Logged By: S. BUTRENCHUK

Date: FEBRUARY, 1970

Composites:

Block:

Sect.:

Place:

App. Bear:

App.: Dip.:

Length:

From

To

Discard:

Reason:

396	410	Sandstone, very hard.	
410	420	Sandstone, very hard.	
420	443.5	Grey sandstone, very hard.	
443.5	451	Coal.	436.5 - 444.0
451	453	Grey shale.	
453	457	Coal.	455.0 - 471.0
457	464.8	Grey shale.	
464.8	488	Coal, at 467' - 0.5' shale, few other shale partings.	474.0 - 479.0
488	489.5	Grey shale.	
489.5	512	Grey sandstone, hard.	
512	530	Sandstone, very hard.	

Note:- Drill nut at bottom of the hole.

Core Size

Hole No.

R.H. 123

Page

2

# Diamond Drill Geological Log



K-FAROENS 70(3)A-2

McAuley Drilling Co.

Objective:

Sampled:

312

Logged By: S.B. Butrenchuk

Date: February, 1970

Composites:

Block:

Sect.:

Place:

App. Bear:

App. Dip:

Length:

Mt. Turnbull

From To Discard: Reason:

0	4	Clay and rocks	Revised by Gamma-Neutron Log  <b>NOT SAMPLED</b>  <b>- SINGLE WALL PIPE</b>
4	23	Gr. sandstone - very hard	
23	24.2	Sandstone	
24.2	24.6	Shale	
24.6	25	Sandstone	
25	27	Carbonaceous Shale	
27	27.8	Black Shale	
27.8	28	Coal	
28	30	Carbonaceous Shale	
30	30.3	Black Shale	
30.3	31	Coal	68-75.0 Actual, Seam #9  144.0-146.0 Shaly, poor coal
31	36.6	Shale	
36.6	37	Black Shale	
37	43.4	Shale	
43.4	43.6	Coal	
43.6	49	Shale	
49	50	Black Shale with traces of coal	
50	69.6	Shale	
69.6	70.6	Carbonaceous Shale	
70.6	77	Coal	
77	147	Shale	Core Size 4 1/2" rock bit  Hole No. R.H. 124
147	149	Coal	
149	152.2	Black Shale	

40 Grains	Core Classes & Amp.
Color Plot & Dip	Core Classes & Amp.

# Diamond Drill Geological Log



McAuley Drilling Co.

Objective:

Sampled:

Logged By: S.B. Butrenchuk Date: February, 1970

Composites:

Block: Sect.: Place: App. Bear: App. Dip: Length:

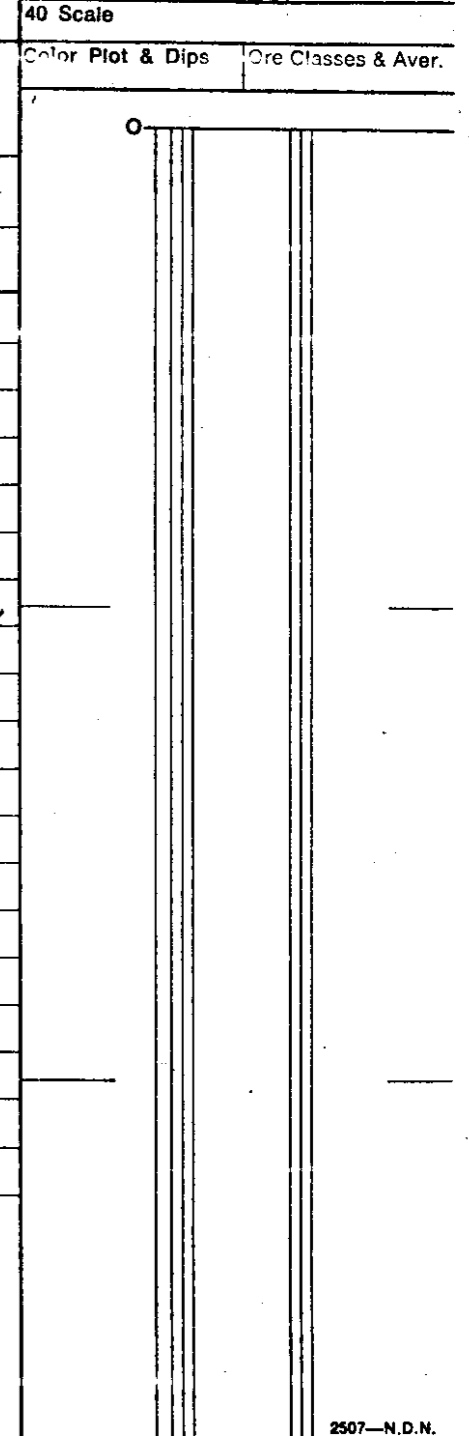
From To Discard: Reason:

152.2	160	Coal	Seam 7	149.5 - 174.5	Good Coal
160	179.6	Coal		174.5 - 178.0	Dirty, poor coal
179.6	180.4	Shale			
180.4	180.8	Coal			
180.8	220	Shale			
220	235	Gr. Shale			
235	237	Coal - Shale Bands	Seam 5	236.5 - 267.0	Good Coal, 252-253.0 Shaly
237	268	Coal: @ 247' 0.5' Shale		267.0 - 271.5	Shale
		266.5' 0.5' Shale		271.5 - 275.0	Coal fair quality
268	270	Shale - coal bands			
270	274.5	Coal - Shaley throughout			
274.5	275.5	Coal			
275.5	290.5	Gr. Shale - few thin coal bands			
290.5	292	Gr. Sandstone - hard			
292	304	Gr. Shale			
304	349	Gr. sandstone - very hard			
349	365	Sandstone - Very hard			
365	400	Gr. Sandstone - very hard			
400	406	Sandstone	Seam 4	401-409.5	Coal, fair quality
406	407	Black Shale		404.5 - 412.0	Shale
407	411	Coal		412 - 414.5	Siltstone
411	411.8	Shale		414.5 - 435.5	Good Coal
411.8	413.8	Coal		429-431.0	Shaly
				435.5 - 439.0	Shaly coal

Core Size 4 1/2"

Hole No. R.H. 124

Page 2



# Diamond Drill Geological Log



McAuley Drilling Co.

Objective:

Sampled:

40 Scale

Logged By: **W.E. Pearson**      Date: **February, 1970**

Composites:

Color Plot & Dips      Ore Classes & Aver.

Block:      Sect.:      Place:      App. Bear:      App. Dip.:      Length:

From      To      Discard:      Reason:

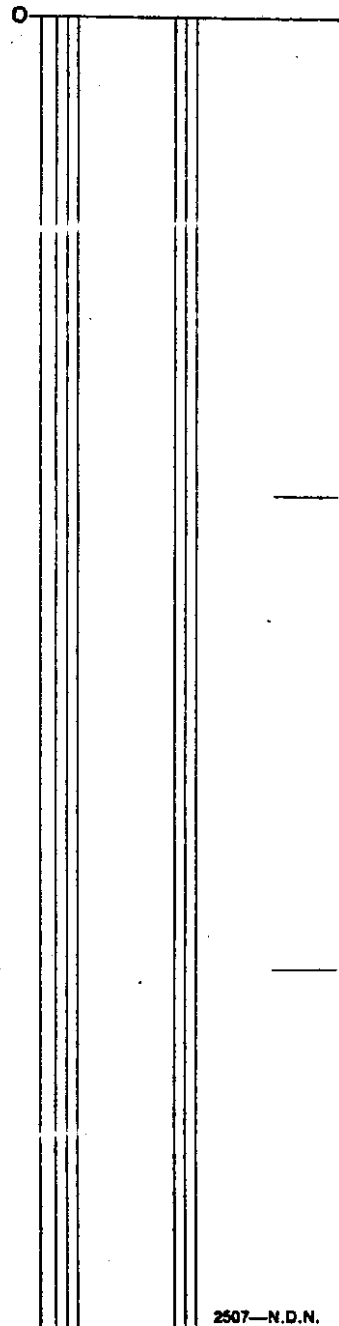
413.8	415	Black Shale	
415	416	Carb. Shale	
416	418.6	Coal	
418.6	420	Shale	
420	441	Coal	
441	445	Shale trace of coal	
445	449	Shale	
449	465	Sandstone	
465	468	Hard Sandstone	

End Hole

Core Size  $4\frac{1}{2}$

Hole No. **R.H. 124**

Page **3**



# Diamond Drill Geological Log



K-FROENGE 70631A-2

BECKER DRILLING COMPANY

Objective:

Sampled:

312

Logged By: S.B. BUTRENCHUK

Date: MARCH, 1970

Composites:

Block:

Sect.:

Place:

TURNBULL.

App. Bear:

App.: Dip.:

Length:

From To Discard: Reason:

0	40	Overburden.	
40	45	Coal.	
45	55	Coal.	
55	140	Shale and sandstone.	
140	220	Sandstone.	
220	320	Sandstone.	
320	360	Sandstone.	
360	380	Sandstone and shale.	
380	408	Coal.	
408	412	Black shale.	
412	415	Coal.	
415	423	Black shale.	
423	429	Coal.	
429	461	Black shale.	
461	464	Coal.	
464	500	Coal.	
500	507	Coal.	
507	515	Shale.	
515	545	Sandstone.	
545	550	Shale.	
550	585	Sandstone and shale.	
585	613	Sandstone.	
613	625	Sandstone.	
		End of hole.	

Core Size

4 7/8"

Hole No.

RH 125

Page

1

40 Scale	
Color Plot & Dips	Ore Classes & Aver.

TURNBULL

DIAMOND DRILL SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
40	55	"9" Raw Coal Composite				0.4	50.2	15.2	34.2	1½, 1	0.33	
		Clean Coal Composite				0.2	13.4	20.9	65.5	3, 3½	0.31	
380	408	"7" Raw Coal Composite				0.43	38.7	19.3	41.6	7, 7	0.35	
		Clean Coal Composite				0.30	13.2	21.0	65.5	5½, 5½	0.36	
465	510	"5" Raw Coal Composite				0.4	26.2	19.2	54.2	2½, 2½	0.36	
		Clean Coal Composite				0.6	9.0	20.2	70.2	3, 3½	0.37	

# Diamond Drill Geological Log



K-forecast 70(3)A-2

McAULEY DRILLING COMPANY

Objective: S. BUTRECHUK  
 Logged By: W.E. PEARSON Date: FEBRUARY, 1970  
 Sampled: Composites: **312**

Block: Sect.: Place: MT. TURNBULL App. Bear: App.: Dip.: Length:

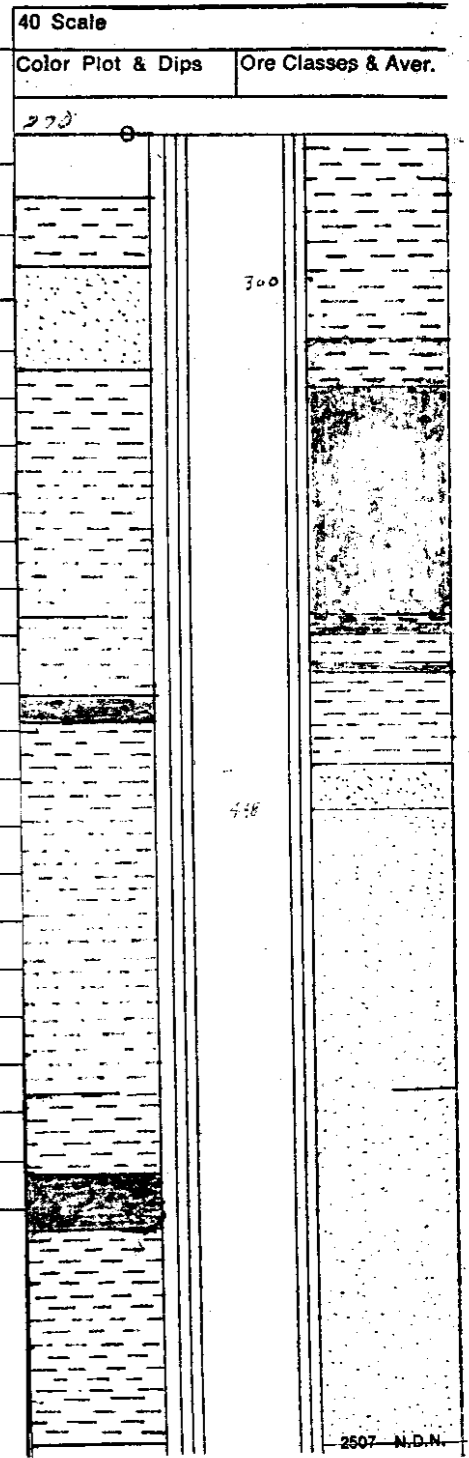
From	To	Discard:	Reason:	Color Plot & Dips	Ore Classes & Aver.
0	13	Overburden.			
13	27	Grey shale.			
27	48	Grey sandstone, hard.			
48	116	Shale.			
116	121	Coal.	119.0 - 118.0		
121	190	Shale.			
190	191	Shale, trace coal.			
191	210	Shale.			
210	214	Shale, trace coal.	207.0 - 220.5		
214	225	Coal			
225	229	Black shale.			
229	300	Shale.			
300	322.5	Grey shale.			
322.5	369	Coal. 1/2' shale at 358.5'.	320.0 - 346.0		
369	371.5	Grey shale.			
371.5	373.5	Coal, shaley.			
373.5	379.5	Shale, coal bands to 377 feet.			
379.5	381.5	Coal.			
381.5	400	Shale, coal bands at 385 feet, 0.8 coal.			
400	448	Grey sandstone, very hard.			
448	469	Grey sandstone, very hard.			
469	478	Sandstone, very hard.			
478	483	Sandstone, very hard.			

*Revised by radiation log*

**NOT SAMPLED  
- SINGLE WALL PIPE**

Core Size  
4 1/2"

Hole No. R.H. 126 Page 1





# Diamond Drill Geological Log



McAULEY DRILLING COMPANY

Objective:

S.B. BUTRENCHUK

Sampled:

Logged By: W.E. PEARSON

Date: FEBRUARY, 1970

Composites:

Block:

Sect.:

Place:

App. Bear:

App.: Dip.:

Length:

MT. TURNBULL

From

To

Discard:

Reason:

483 505 Grey - black and white sandstone, very hard.

505 510 Sandstone, very hard.

510 525 Sandstone, very hard.

525 547.5 Grey and black and white sandstone.

547.5 557.5 Grey to brown shale, coal traces.

Hole abandoned at 557.5 feet - 257 feet of drill stem left in hole.

40 Scale

Color Plot & Dips

Ore Classes & Aver.

557.5'

Core Size

4 1/4"

Hole No.

R.H. 126

Page

2

# Diamond Drill Geological Log



K-FROZEN 20631A-2

Becker Drilling Co.

20 Scale

Objective:

Sampled:

Logged By: S.B. Butrenchuk

Date: March, 1970

Composites:

312

Block:

Sect.:

Place:

App. Bear:

App. Dip.:

Length:

Turnbull

From To Discard: Reason:

0	8	Clay and gravel	Revised by Gamma Ray log 0-428.0 feet 13-16.5 possibly coal above water table cannot be indicated on radiation log
8	16	Hard sandstone	
16	18	Coal	
18	43	Hard sandstone	
43	68	Hard sandstone	
68	90	Sandstone	
90	129	Sandstone	
129	166	Sandstone	
166	170	Sandstone	
170	191	Shale with coal stringers	Prominent fault indicated @ 205 ft.
191	225	Shale	
225	231	Sandstone	
231	269	Sandstone	
269	289	Shattered sandstone	
289	301	Shattered sandstone	
301	327	Sandstone - shale stringers	
327	335	Shattered sandstone	
335	342	Sandstone	
342	344	Shale with clay stringers	
344	370	Coal	# 4 { 340-369.0 Good Coal 369-371.5 Shale 371.5-376.0 Coal, good quality 376-428.0 Sandstone
370	380	Coal with shale stringers	
380	381	Shale	
381	383	Coal	

Core Size 4-7/8"

Hole No. RH 127

Page 1

135'

270'

# Diamond Drill Geological Log



Becker Drilling Co.

20 Scale

Objective:

Sampled:

Logged By: S.B. Butrenchuk

Date: March, 1970

Composites:

Block:

Sect.:

Place:

App. Bear:

App. Dip.:

Length:

Turnbull

From To

Discard:

Reason:

383 400 Sandstone

5746.3

400 430 Sandstone

340

430 436 Sandstone

5206.3

Hole No. 127 Elev. 5746.3

Lat. 49° 74.0' Dep. 77.048.0

436' End of hole

Elev. Th.

Top of \_\_\_\_\_ @ \_\_\_\_\_

Top of \_\_\_\_\_ @ \_\_\_\_\_

Top of \_\_\_\_\_ @ \_\_\_\_\_

Top of \_\_\_\_\_ @ \_\_\_\_\_

Core Size 4-7/8"

Hole No. RH 127

Page 2

405'

2597-M.D.M.



# Diamond Drill Geological Log



K-FACSIMILE 70\*(3)12-7

McAULEY DRILLING COMPANY

Objective:

Sampled:

312

Logged By: S.B. BUTRENCHUK

Date: MARCH, 1970

Composites:

Block:

Sect.:

Place:

TURNBULL

App. Bear:

App. Dip.:

Length:

From To Discard: Reason:

0	7	Clay and boulders.	
7	11	Gravel.	
11	17	Clay and rocks.	
17	40	Sandstone.	
40	88.5	Grey sandstone, hard. Limey below 50 feet, very hard.	
88.5	90	Coal.	85.0 - 86.5
90	93.5	Shale.	
93.5	95.2	Sandstone.	
95.2	95.5	Shale.	
95.5	97	Sandstone, fine grained.	
97	98.5	Shale.	97.0 - 104.0
98.5	100.5	Sandstone.	
100.5	104.5	Coal, soft with carbonaceous shale.	
104.5	107	Coal.	
107	126.5	Sandstone, soft, coarse-grained.	
126.5	134.5	Sandstone, hard, coarse-grained.	
134.5	136	Sandstone, fine-grained.	
136	139.5	Sandstone, soft, coarse-grained.	
139.5	149.5	Sandstone, hard.	
149.5	150.5	Carbonaceous shale, some coal.	
150.5	178.5	Shale.	164.0 - 195.0
178.5	186	Coal.	
186	203.5	Coal, shale bands between 192.5 and 196 feet. At 199.5 - 0.4 feet shale.	

Revised by Radiation log  
**NOT SAMPLED**  
**- SINGLE WALL PIPE**

Scale  
 Color Plot & Dips  
 Ore Classes & Aver.

Core Size

4 1/2"

Hole No.

RH 128

Page

1

135

2507-N.D.N. 2/70

# Diamond Drill Geological Log



McAULEY DRILLING COMPANY

Objective:

Sampled:

Logged By: S.B. BUTRENBHUK

Date: MARCH, 1970

Composites:

Block:

Sect.:

Place: TURNBULL

App. Bear:

App.: Dip.:

Length:

From	To	Discard:	Reason:
203.5	205.5	Shale, coal traces.	203.0 - 204.0
205.5	210	Coal.	
210	250	Grey shale.	
250	269	Grey sandstone.	
269	291	Sandstone, fine-grained, very hard.	
291	314	Grey sandstone, very hard.	
314	331	Sandstone, very hard.	
331	358	Grey sandstone, very hard.	
358	364	Sandstone.	
364	368.5	Shale.	
368.5	369.5	Sandstone.	
369.5	379.5	Shale.	
379.5	380.5	Coaly shale.	
380.5	381.5	Shale.	
381.5	384	Siltstone.	
384	385.5	Coaly shale.	
385.5	391	Shaley coal.	
391	393.5	Coal.	
393.5	395.5	Siltstone.	
395.5	420	Coal.	
420	424	Siltstone.	
424	429	Siltstone.	
429	445	Grey sandstone, very hard.	
		End of hole.	

Core Size

4 1/2"

Hole No.

RH 128

Page

2

Scale

Color Plot & Dips

Ore Classes & Aver.

270'

405'

2507-N.D.N.

# Diamond Drill Geological Log



K- FORDING 70 (3)A-2

McAuley Drilling Co.

Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

Logged By: S.B. Butrenchuk Date: February, 1970 Composites: \_\_\_\_\_

**312**

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: Mt. Turnbull App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From	To	Discard:	Reason:
0	9	Overburden	
9	16	Shale - soft	<i>6-24.0 = Coal</i>
16	28	Shale	
28	29	Carbonaceous Shale	
29	32	Bl. Shale - fractured	
32	33	Coal	
33	38	Shale	
38	53	Gr. Shale	
53	54.5	Coal	
54.5	85	Gr. Shale	
85	93	Gr. Sandstone - hard	
93	95	Gr. Shale	
95	112	Sandstone	
112	116	Shale	
116	120	Sandstone	
120	190	Shale	
190	192.6	Coal	<i>189-195.0 Coal</i>
192.6	193.6	Shale	
193.6	196	Coal	
196	210	Shale	
210	220	Sandstone	
220	235	Shale	
235	256	Gr. Shale	

*Revised by Gamma-Neutron Log*

**NOT SAMPLED  
- SINGLE WALL PIPE**

Scale 200	Color Plot & Dips	Ore Classes & Aver.
0		
32'-33'		
53'-54.5'		
190'-192.6'		
193.6'-196'		
256'-258'		
276.5'-278'		
294.6'-318.3'		
355'-356'		
371'-397'		
404'-405'		
421.6'-434'		
609' end		

Core Size **4 1/2"**  
Hole No. **RH 129** Page **1**

# Diamond Drill Geological Log



McAuley Drilling Co.

40 Scale  
Color Plot & Dips    Ore Classes & Aver.

Objective:

Sampled:

Logged By: S.B. Butrenchuk

Date: February, 1970

Composites:

Block:                      Sect.:                      Place:                      App. Bear:                      App.: Dip.:                      Length:

Mt. Turnbull

From	To	Discard:	Reason:
256	258	Coal	
258	276.5	Gr. Shale	
276.5	278	Coal	
278	294.6	Gr. Shale	
294.6	318.3	Coal - at 317' 0.5' of shale	292.0 - 311 Coal
318.3	355	Gr. Shale - coal bands at 325'	311 - 314.5 Shaly coal
355	356	Coal	
356	371	Gr. Shale	
371	397	Coal - soft bands; at 395.8' - 0.5' of shale	367 - 391.0 Coal
397	404	Gr. Shale - coal bands	shaly 376 - 372.5, 381 - 382.5 386 - 38.5
404	405	Coal	
405	412.6	Shale	391 - 394.5 shale, carbonaceous
412.6	419	Shale with a trace of coal	
419	421.6	Shale - soft	406 - 409.5 Coal
421.6	430	Coal	
430	434	Coal with a trace of shale	
434	435	Shale	
435	440	Shale	
440	445	Shale with a trace of coal	
445	452	Shale	
452	454	Carbonaceous Shale	
454	495	Shale - hard	
495	500	Gr. Shale	

Core Size 4 1/2"

Hole No. RH 129

Page 2



# Diamond Drill Geological Log



McAuley Drilling Co.

Objective:

Sampled:

40 Scale

Color Plot & Dips

Ore Classes & Aver.

Logged By: S.B. Butrenchuk

Date: February, 1970

Composites:

Block:

Sect.:

Place:

App. Bear.:

App.: Dip.:

Length:

Mt. Turnbull

From To Discard: Reason:

500 540 Gr. Sandstone - very hard

540 570 Sandstone - very hard

570 578 Sandstone - very hard

578 602 Gr. Sandstone - very hard

602 609 Sandstone

609' End of hole

Core Size 4½"

Hole No. RH 129

Page 3

# Diamond Drill Geological Log



K-FORGING 70(3)A-2

Objective: BECKERS DRILL LOG

Sampled: **312**

Logged By: W.E. PEARSON

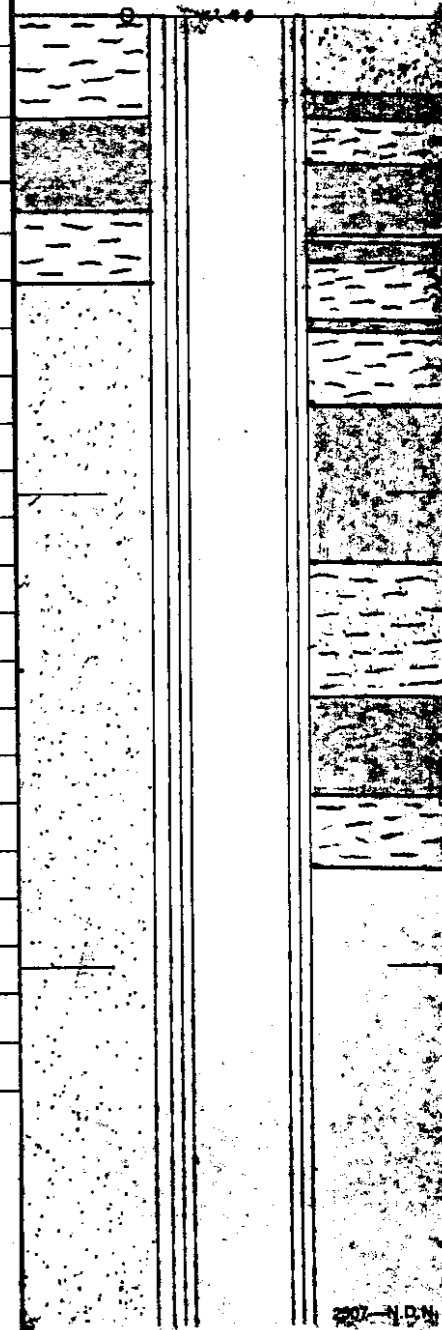
Date: JANUARY, 1970

Composites:

Block:      Sect.:      Place:      App. Bear:      App. Dip.:      Length:

From	To	Discard:	Reason:
0	22	Sandy shale.	
22	40	Coal. Water Table at 25.	
40	45	Shale coal stringers.	
45	55	Sandy shale.	
55	135	Hard sandstone, shale layers.	
135	285	Hard sandstone, shale layers.	
285	290	Coal.	
290	300	Shale.	
300	315	Coal.	
315	316	Shale.	
316	320	Coal.	
320	325	Shale, coal stringers.	
325	333	Shale.	
333	335	Coal.	
335	350	Shale and sandstone.	
350	383	Coal.	
383	415	Shale sandstone.	
415	430	Coal.	
430	445	End of Hole.	

40 Scale  
Color Plot & Dips      Ore Classes & Aver.



Core Size

Hole No.

R.H. 130

Page

1

FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
22	25	Coal	2166		3.0								
25	30	Coal	2167		5.0								
30	35	Coal	2168		5.0								
35	40	Coal	2169		5.0								
		Raw Composite (22-40)					1.0	24.9	21.5	52.6	1½,2,2	.52	Seam 9
		Clean Composite (22-40)					1.2	8.6	22.9	67.3	1,1,1	.57	
285	290	Coal	2170		5.0								
300	310		2171		10.0								
310	316		2172		6.0								
316	320		2173		4.0								
		Raw Composite (300-320)					.7	28.9	19.8	50.6	5½,5,5	.36	Seam 7
		Clean Composite (300-320)					.5	13.1	22.8	63.6	6,6½,6	.88	
350	355	Coal )	2174		5.0								
350	355	Coal )	2175		5.0								
		Two Samples											
360	365	Coal	2176		5.0								
365	365	Coal	2177		5.0								

FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
365	370	Coal	2178		5.0								
370	375	T w o S a m p l e s	2179		5.0								
370	375		2180		5.0								
375	380		2181		5.0								
380	383		2182		3.0								
		Raw Composite (350-383)					1.6	27.9	19.8	50.7	3½, 3, 3½	.36	Seam 5
		Clean Composite (350-383)					.3	11.6	22.8	65.2	4, 4½, 4½	.64	
410	415	T w o S a m p l e s	2183		5.0								
410	415		2184		5.0								
420	425		2185		5.0								
		Raw Composite (410-425)					.6	31.9	18.4	49.1	2½, 2½, 3	.33	Unknown Seam
		Clean Composite (410-425)					.3	15.3	21.3	63.1	3½, 3, 3½	.52	

# Diamond Drill Geological Log



K-FARONG 70(3)A-2

Objective: BECKER DRILL LOG

Sampled: **312**

Logged By: W.E. PEARSON

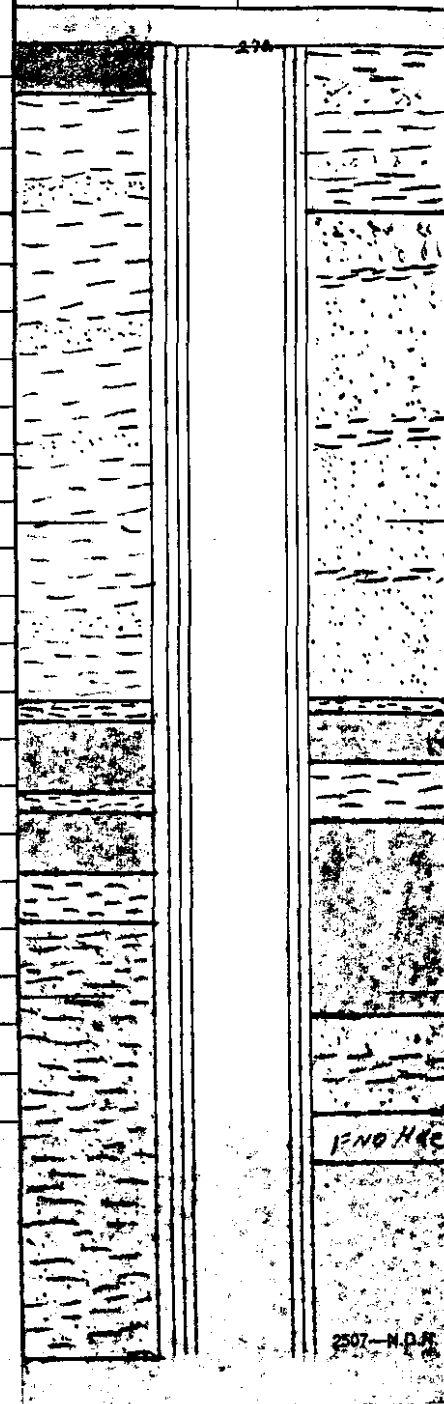
Date:

Composites:

Block: Sect.: Place: *Eagle* App. Bear: App. Dip.: Length:

From	To	Discard:	Reason:
0	10	Coal.	Seam No. 11 Seam (part).
10	75	Shale sandstone layers.	
75	135	Shale sandstone layers.	
135	139	Black shale.	
139	154	Coal.	Seam 9
154	157	Shale .	
157	170	Coal.	Seam 8
170	180	Shale.	
180	270	Shale sandstone layers.	
270	305	Shale sandstone layers.	
305	365	Sandstone shale layers.	
365	410	Sandstone shale layers.	
410	413	Shale.	
413	418	Coal.	
418	420	Shale.	
420	430	Sandstone and shale.	
430	470	Coal.	
470	490	Sandstone and shale.	

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



Core Size

Hole No.

R.H. 131

Page

1

FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
139	140	Coal	2849										
140	145	Coal	2850										Seam 9
145	150	Coal	2924										
150	154	Coal	2925										
160	170	"NO SAMPLE"											
413	418	Coal	2186										
430	435	Coal	2187										Seam 7
435	440	Coal	2188										

# Diamond Drill Geological Log



K-FOODING 70(3)A-2

312

Objective: BECKER LOG DRILL

Sampled:

Logged By: W.E. PEARSON

Date:

Composites:

Block:

Sect.:

Place:

App. Bear:

App.: Dip:

Length:

From To Discard: Reason:

0	15		Overburden.
15	40		Sandstone, shale layers. Coal stringer at 38.0 feet.
40	45		Hard sandstone.
45	105		Shale and sandstone.
105	115		Shale.
115	120		Shale, coal stringers.
120	380		Shale, sandstone stringers.

40 Scale

Color Plot & Dips

Ore Classes & Aver.

Core Size

Hole No.

Page

R.H. 134

1

# Diamond Drill Geological Log



6188 R-FAZONING 70(3)A-2  
257  
5723

BECKER DRILL LOG

Objective:

Sampled:

Logged By: W.E. PEARSON

Date: JANUARY, 1970

Composites:

312

Block:

Sect.:

Place:

Clode Creek

App. Bear:

App.: Dip.:

Length:

From To Discard: Reason:

0	10	Overburden	
10	45	Sandstone.	
45	50	Shale.	
50	65	Coal.	-9-? //
65	85	Shale, coal stringers.	
85	105	Shale, sandstone layers.	
105	160	Shale, sandstone, coal stringers.	
160	175	Sandstone.	
175	200	Shale, sandstone layers.	
200	204	Black shale.	
204	216	Coal.	# 10
216	220	Shale.	
220	245	Sandstone.	
245	257	Shale sandstone.	
257	280	Coal, stringers, shale.	7 9
280	292	Shale and sandstone.	
292	295	Coal.	
295	385	Shale, sandstone stringers.	
385	415	Shale.	
415	440	Sandstone, shale layers.	
440	480	Shale, sandstone.	
480	500	Coal.	5 7
500	510	Sandstone.	
		End of Hole.	

40 Scale

Color Plot & Dips

Ore Classes & Aver.

510

207

207-N.D.M.

Core Size

Hole No.

R.H. 135

Page

1



FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	PSI	S	REMARKS
50	55	Coal	2055										] Seam 9
55	60	Coal	2056										
60	65	Coal	2057										
		Seam 4 Raw Coal Composite					1.1	19.5	23.5	56.1	7½, 8	0.66	
		Clean Coal Composite					0.5	7.7	26.6	65.2	8, 8	0.72	
204	214	Coal )	2058										] Seam 7
204	214	Coal ) Two Samples	2059										
214	216	Coal	2060										
		Seam 7 Raw Coal Composite					0.9	22.4	23.2	53.5	3½, 4	0.41	
		Clean Coal Composite					0.5	11.0	23.8	64.7	5, 5	0.50	
257	260	Coal	2061										] Seam 5
260	265	Coal	2062										
265	270	Coal	2063										
270	275	Coal	2064										
275	280	Coal	2065										

FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
292	295	Coal	2066										Minor Seam
480	485	Coal	2067										} Seam 4
485	490	Coal	2068										
490	495	Coal	2069										
495	500	Coal	2070										
		<i>Seam 4 Raw Coal Composite</i>					1.1	36.3	21.7	40.9	5½, 5	1.0	
		<i>Clean Coal Composite</i>					0.6	11.0	26.6	61.8	7½, 7½	0.84	
257	280	<i>Seam 5 Raw Coal Composite</i>					1.3	24.3	20.3	57.1	4, 3½	0.38	
		<i>Clean Coal Composite</i>					0.6	9.2	23.4	66.8	6, 5½	0.48	

# Diamond Drill Geological Log



K-FIELDING 70 (3)A-2

Becker Drilling Co.

Objective:

Sampled:

312

Logged By: W. E. Pearson

Date: April, 1970

Composites:

Block:

Sect.:

Place:

App. Bear:

App. Dip.:

Length:

Eagle Mtn.

From To Discard:

Reason:

0	90	Sandstone	
90	116	Shale & Sandstone	
116	138	Coal Shale Layers	5206 To 5210 //
138	230	Shale & Sandstone	
230	284	Sandstone	
284	304	Coal	5211 To 5214
304	305	Shale Coal Stringers	
305	307	Shale	
307	310	Shale Coal Stringers	
310	313	Coal	5215
313	315	Shale	
315	327	Shale & Sandstone	
327	332	Coal Shale Stringers	5216 & 17
338	350	Sandstone	

End of Hole

Hole No. \_\_\_\_\_ Elev. \_\_\_\_\_  
Lat. \_\_\_\_\_ Dep. \_\_\_\_\_  
Elev. Th.  
Top of \_\_\_\_\_ @ \_\_\_\_\_ | \_\_\_\_\_  
Top of \_\_\_\_\_ @ \_\_\_\_\_ | \_\_\_\_\_  
Top of \_\_\_\_\_ @ \_\_\_\_\_ | \_\_\_\_\_  
Top of \_\_\_\_\_ @ \_\_\_\_\_ | \_\_\_\_\_

Core Size

4 1/2

Hole No. RH 136

Page 1

DIAMOND DRILL SAMPLING RECORD

CLAUDE CREEK

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
116	138	"11" Raw Coal Composite				0.3	13.7	20.9	65.1	4½,4,4	.71	
		Clean Coal Composite				1.0	9.3	24.7	65.0	7½,7½,7	.72	
284	304	"9" Raw Coal Composite				0.7	26.7	20.9	51.7	4½,4,4	.47	
		Clean Coal Composite				0.8	7.4	23.6	68.1	7½,7,7	.51	
310	313	"9" Lower										
		Raw Coal Composite				0.7	47.0	16.1	36.2	2½,2½,2½	.44	
		Clean Coal Composite				0.8	12.8	23.0	63.4	8,8,8	.65	
327	332	"8" Raw Coal Composite				0.5	36.8	18.9	43.8	3½,3,3½	.47	
		Clean Coal Composite				0.7	11.5	22.8	65.0	7,7½,7½	.66	

# Diamond Drill Geological Log



K-FORGING 70/31A-2

Becker Drilling Co.

Objective:

Sampled:

Logged By: **W.E. Pearson**

Date: **April 1970**

Composites:

**312**

Block:

Sect.:

Place:

**Eagle Mountain**

App. Bear:

App. Dip.:

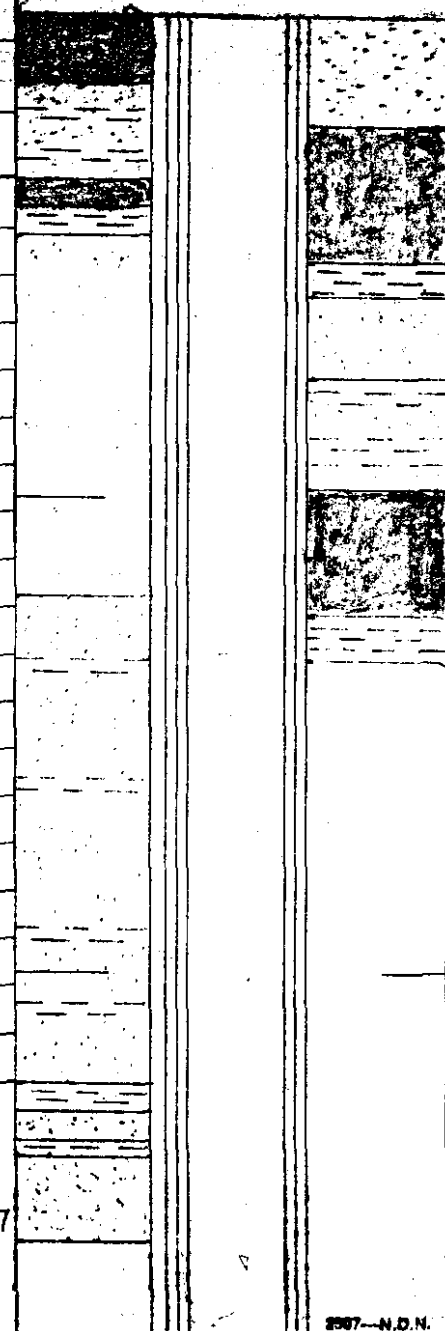
Length:

From To Discard: Reason:

0	14	Coal shale stringer	
14	34	Shale and sandstone	
34	39	Coal	
39	45	Shale Coal Stringers Sandstone	
45	120	Sandstone	
120	220	Sandstone Shale Stringers	
220	225	Shale	
225	231	Sandstone	
231	234	Shale	
234	257	Sandstone	
257	280	Sandstone and Clay	
280	284	Coal shale stringers	
284	308	Coal	
308	315	Shale	
315	332	Sandstone	
332	335	Shale	
335	355	Shale sandstone	
355	381	Coal	
381	390	Shale	

Hole No. 137 Elev. 2900  
 Lat. 49° 28' Dep.           
 Elev. Th.  
 Top of 1 @           
 Top of 2 @           
 Top of 7 @           
 Top of 3 @         

40 Scale  
 Color Plot & Dips  
 Ore Classes & Aver.



Core Size

End of Hole

Hole No.

RH 137

Page 1 257

DIAMOND DRILL SAMPLING RECORD

CLODE CREEK

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
0	14	"9" Raw Coal Composite				2.3	55.5	18.6	23.6		0.33	
		Clean Coal Composite				2.3	11.0	22.6	64.1	1,1,1	0.58	
34	39	"8" Raw Coal Composite				.7	33.0	18.6	47.7	2,2,2 $\frac{1}{2}$	0.44	
		Clean Coal Composite				.7	9.9	22.3	67.1	5,4 $\frac{1}{2}$ ,5	0.66	
284	308	"7" Raw Coal Composite				0.5	28.2	20.0	51.3	4 $\frac{1}{2}$ ,5,5	0.36	
		Clean Coal Composite				0.7	11.3	22.2	65.7	7,7,7 $\frac{1}{2}$	0.41	
355	381	"5" Raw Coal Composite				0.6	24.4	19.2	55.8	3,2 $\frac{1}{2}$ ,3	0.36	
		Clean Coal Composite				0.8	9.7	21.1	68.5	4,4,4	0.34	

# Diamond Drill Geological Log



K- FOLDING 70(3)A-2

Becker Drilling Co.

Objective:

Sampled: **312**

Logged By: **W.E. Pearson** Date: **May 7, 1970**

Composites:

Block: Sect.: Place: **Eagle Mtn.** App. Bear: App.: Dip.: Length:

From	To	Discard:	Reason:
0	23	Coal	5218 To 5221
23	27	Shale	
27	31	Coal	5222
31	35	Shale	
35	54	Sandstone Very Hard	
54	64	Coal	5223 To 5224
64	85	Shale & Sandstone	
85	160	Sandstone	
160	166	Shale	
166	190	Coal Shale Stringers	5225 To 5229
190	240	Shale & Sandstone	
240	265	Sandstone	
265	266	Coal	No Sample
266	290	Shale & Sandstone	
290	336	Shale	
336	354	Coal Shale Stringers	5230 To 5233
354	360	Shale Coal Stringers	
360	363	Coal Shale Stringers	5234
363	365	Shale Coal Stringers	
365	370	Shale & Sandstone	

Hole No. 138 Elev. 715  
 Lat. \_\_\_\_\_ Dep. \_\_\_\_\_  
 Elev. Th.  
 Top of \_\_\_\_\_ @ \_\_\_\_\_  
 Top of \_\_\_\_\_ @ \_\_\_\_\_  
 Top of \_\_\_\_\_ @ \_\_\_\_\_  
 Top of \_\_\_\_\_ @ \_\_\_\_\_

End of Hole

Core Size  
 Hole No. **RH 138** Page **1**

40 Scale  
 Color Part & Size  
 Ore Classes & Aves.  
 370  
 2207-N.D.N.

DIAMOND DRILL SAMPLING RECORD

CLODE CREEK

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
5	23	"12" Raw Coal Composite				1.9	32.0	22.0	44.1	2½, 2½, 2½	0.49	
		Clean Coal Composite				2.3	6.8	27.0	63.9	4, 4, 4½	0.60	
27	31	"12" Part										
		Raw Coal Composite				0.9	26.9	23.5	48.7	6½, 6, 6½	1.48	
		Clean Coal Composite				1.0	9.0	27.8	62.2	8, 8, 8	1.53	
54	64	"Unknown" Raw Coal Composite				0.8	23.2	25.0	51.0	8, 8, 8	0.66	
		Clean Coal Composite				1.1	6.9	27.4	64.6	8, 8, 8	0.70	
166	190	"11" Raw Coal Composite				0.6	24.4	23.1	51.9	7, 7, 7	0.74	
		Clean Coal Composite				1.2	9.6	25.4	63.8	8, 8, 8	0.81	
336	354	"9" Raw Coal Composite				0.8	34.2	19.6	45.4	2½, 3, 3	0.41	
		Clean Coal Composite				1.0	9.3	23.3	66.4	6½, 6½, 6½	0.52	



# Diamond Drill Geological Log



K - FORWARDING 70(3)A-2

Becker Drilling Co.

Objective:

Sampled: **312**

Logged By: W. E. Pearson Date: May, 1970

Composites:

Block: Sect.: Place: App. Bear: App. Dip: Length:

From	To	Discard:	Reason:
0	4	Coal	11 UP
4	55	Sandstone	
55	60	Shale	
60	66	Sandstone	
66	69	Shale	
69	73	Sandstone	
73	75	Shale	
75	112	Sandstone Very Hard	
112	133	Coal Shale Stringers	5235 To 5239
133	150	Shale Hard Sandstone Coal Stringers	
150	190	Sandstone	
190	207.5	Shale	
207.5	209	Coal & Shale Layers	
209	212	Shale	
212	278	Sandstone	
278	300	Coal Shale Stringers	5240 To 5244
300	302	Shale	
302	304	Coal	No Sample
304	306	Shale	
306	308	Coal	5245
308	310	Shale Coal Stringers	5246
310	320	Shale & Sandstone	
		End Hole	

Hole No. _____	Elev. _____
Lat. _____	Dep. _____
	Elev. Th. _____
Top of _____ @ _____	'
Top of _____ @ _____	'
Top of _____ @ _____	'
Top of _____ @ _____	'

Core Size 4 1/2

Hole No. RH 139

Page 1

DIAMOND DRILL SAMPLING RECORD

CLODE CREEK

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
112	133	"11" Raw Coal Composite				0.8	37.1	19.8	42.3	4,4 $\frac{1}{2}$ ,4	1.15	
		Clean Coal Composite				1.1	10.6	25.4	62.9	7 $\frac{1}{2}$ ,8,8	0.82	
278	300	"9" Raw Coal Composite				0.5	29.9	24.2	45.4	2 $\frac{1}{2}$ ,2 $\frac{1}{2}$ ,2	0.33	
		Clean Coal Composite				1.0	10.4	22.6	65.9	5,5,5	0.54	
306	310	"8" Raw Coal Composite				0.7	32.8	16.1	50.4	4,4 $\frac{1}{2}$ ,4 $\frac{1}{2}$	0.41	
		Clean Coal Composite				1.0	10.3	23.4	65.3	7,7,6 $\frac{1}{2}$	0.62	

# Diamond Drill Geological Log



K-FACING 70(3)A-2

BECKER'S DRILLING COMPANY

Objective:

Sampled: **312**

Logged By: S.B. BUTRENCHUK Date: FEBRUARY, 1970

Composites:

Block: Sect.: Place: **GREENHILLS** App. Bear: App. Dip.: Length:

From	To	Discard:	Reason:
0	22	Overburden, clay, rocks, gravel.	Revised by radiation log
22	60	Shale and sandstone.	
60	100	Hard sandstone with shale layers.	
100	120	Hard shale.	
120	140	Coal.	120 - 139 actual "D"
140	150	Shale.	#2102 - 2105 Good coal
150	157	Coal.	150 - 156.0 Actual "D" lower part
157	205	Hard sandstone layers with shale and coal.	#2106 - 2107
205	230	Hard sandstone with shale layers.	
230	285	Coal.	#2108 - 2117 Top of B" @ 230'
285	300	Shale and mudstone.	230 - 280 ✓ good coal
300	370	Shale and soft sandstone.	
370	415	Shale - coal stringers.	
		End of hole.	

40 Scale

Color Plot & Dips

Ore Classes & Aver.

Core Size

3 7/8"

Hole No.

B.H. 141

Page

1

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
125	140	"D" Raw Coal Composite				0.3	22.6	19.4	57.7	3½, 3½	0.60	
		Clean Coal Composite				0.5	9.2	21.4	68.9	3½, 3½	0.24	
150	157	"D" Lower Raw Coal Composite				0.5	35.9	17.0	46.6	2½, 2½	0.74	
		Clean Coal Composite				0.5	12.2	20.8	66.5	5, 5	0.51	
170	180	"C" Raw Coal Composite				0.2	11.2	21.5	67.1	8, 7½	0.36	
		Clean Coal Composite				0.9	10.6	21.2	67.3	6½, 7	0.28	

# Diamond Drill Geological Log



K-FOLDING 70(3)A-2

BECKER'S DRILLING COMPANY

Objective:

Sampled:

312

Logged By: S.B. BUTRENCHUK

Date: MARCH, 1970

Composites:

Block:

Sect.:

Place:

App. Bear:

App. Dip.:

Length:

GREENHILLS

From	To	Discard:	Reason:
0	15	Very hard sandstone and gravel - overburden.	REVISED by Gamma Newton log
15	35	Clay and gravel.	
35	55	Shale.	
55	68	Black shale.	
68	100	Coal	(2130 to 2135) Actual 53 to 84 "E" shale 69-70.5 rest fair to good coal
100	140	Shale and sandstone - with coal stringers.	
140	170	Shale and sandstone layers.	
170	194	Coal.	(2136 to 2140) Good grade, 169-194.0 Actual "D" 181-182.5 shale 194-196.0 shale
194	197	Shale.	
197	203	Coal.	(2141) 196-200 good coal, part "D" 200-203.0 carbonaceous shale
203	213	Hard shale.	
213	223	Shale and coal stringers.	216-222 "C" seam, good coal
223	246	Shale and hard sandstone.	
246	282	Shale and sandstone.	
282	290	Very hard sandstone.	
290	324	Hard sandstone - shale layers.	
324	343	Coal.	(2142 to 2145) Good Coal, 323-341.5 actual, "B"
343	350	Shale with coal stringers.	
350	355	Black shale with coal stringers.	
355	370	Hard sandstone.	

Core Size

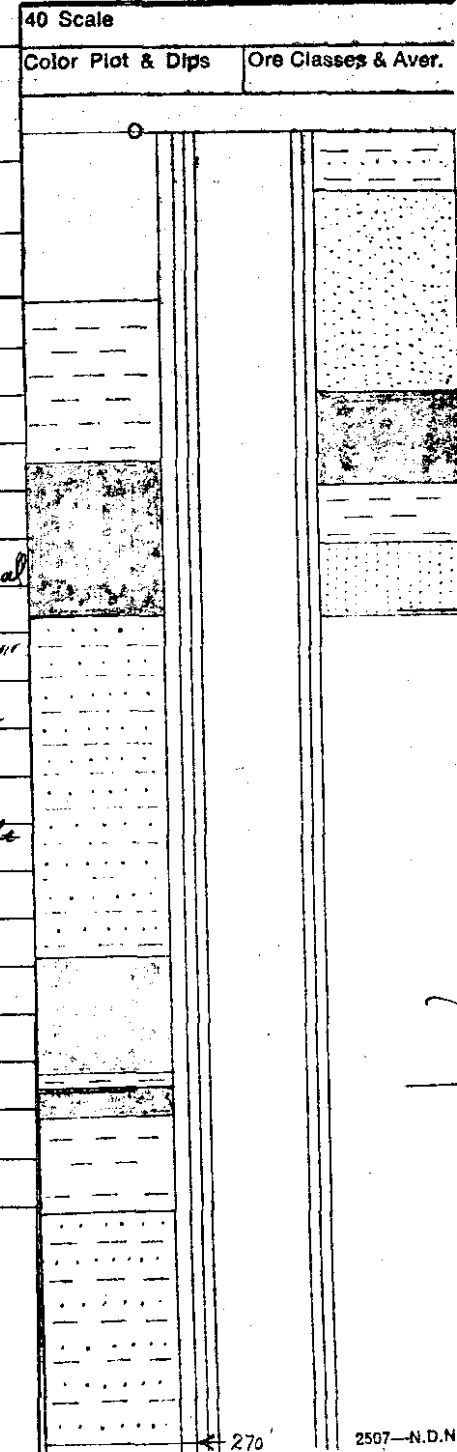
3 7/8"

Hole No.

RH 142

Page

1



270'

2507-N.D.N.

DIAMOND DRILL SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
68	100	"E" Raw Coal Composite				0.7	27.9	20.3	51.1	4½,5	0.52	
		Clean Coal Composite				0.5	11.2	23.7	64.7	7,7	0.34	
170	195.5	"D" Raw Coal Composite				0.5	31.2	19.7	48.6	3,3½	0.77	
197	203	Clean Coal Composite				0.3	10.4	21.9	67.3	4½,4	0.30	
324	343	"B" Raw Coal Composite				0.7	8.1	21.4	69.8	7,7½	0.52	
		Clean Coal Composite				0.54	8.4	22.1	69.0	7,6½	0.32	

# Diamond Drill Geological Log

BECKER DRILL LOG



K-FORDING 70(3)A-2

312

Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_  
 Logged By: W.E. PEARSON Date: FEBRUARY, 1970 Composites: \_\_\_\_\_  
 Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: Green Hills App. Bear: \_\_\_\_\_ App.: Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From	To	Discard:	Reason:
00	20	Overburden	Revised by Gamma-Neutron Log
20	35	Sandy shale.	
35	80	Sandy shale, coal stringers.	(Upper E) 62-70.5 med. dirty coal
80	85	Fault zone.	← No evidence in geophysical log
85	98	Shale sandstone.	
98	114	Coal.	99-114.0 ; 111-112.5 shaley coal (Lower)
114	180	Shale sandstone, coal stringers.	
180	205	Coal.	178-206.0 Good Coal (28") "D"
205	215	Shale.	206-216.0 Shale
215	220	Coal.	216-219.0 Coal
220	225	Shale.	219-222.5 Shale
225	237	Coal.	222.5-236.5 Good Coal part "D"
237	280	Shale.	
280	287	Sandstone.	
287	288	Coal.	285-289.5 shale; 289.5-291.5 coal
288	295	Shale.	291.5-295.0 shale
295	345	Sandstone, coal stringers.	295-306.0 Sandstone; 306-314 shale
345	400	Hard sandstone.	
400	425	Hard sandstone.	
425		End of hole.	

40 Scale

Color Plot & Dips

Ore Classes & Aver.

Core Size \_\_\_\_\_

Hole No. R.H. 143

Page 1

DIAMOND DRILL SAMPLING RECORD

GREENHILLS

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
98	116	"E" Lower Raw Coal Composite				0.7	42.3	18.0	39.0	3½3½3½	0.41	
		Clean Coal Composite				0.3	14.0	23.3	62.3	7½,7,7	0.34	
180	205	"D" Raw Coal Composite				0.8	19.3	20.6	59.3	4,4½,4	0.36	
		Clean Coal Composite				0.68	8,4	21.6	69.3	5,5,4½	0.27	
215	220	"D" Part Raw Coal Composite				0.9	47.2	14.1	37.8	1½1½1½	0.63	
		Clean Coal Composite				0.4	14.0	20.6	65.0	4½4½4½	1.15	
225	232	"D" Part Raw Coal Composite				0.7	14.9	19.6	64.8	3½3½3½	0.33	
		Clean Coal Composite				1.0	7.7	21.1	70.2	4,4½,4	0.31	



FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
98	106	Coal	2071										
106	111	Coal	2072										
111	116	Coal	2073										
180	185	Coal	2074										
<del>185</del>	190	Coal	2075										
190	195	Coal	2076										
195	200	Coal	2077										
200	205	Coal	2078										
215	220	Coal	2079										



# Diamond Drill Geological Log



McAULEY DRILLING COMPANY

Objective:

Sampled:

Logged By: W.E. PEARSON

Date: FEBRUARY, 1970

Composites:

Block:

Sect.:

Place:

App. Bear:

App.: Dip.:

Length:

From

To

Discard:

Reason:

227 229 Sandstone, hard.

229 240 Siltstone.

240 250 Carbonaceous shale.

250 270 Siltstone.

270 299 Sandstone, hard.

299 300 Siltstone.

300 304.5 Black shale.

304.5 315 Carbonaceous shale.

315 318 Coal.

318 329.5 Coal.

329.5 330 Carbonaceous shale.

330 334 Carbonaceous shale.

334 338.5 Coal.

338.5 345 Black shale.

345 360 Carbonaceous shale.

360 369 Black shale.

369 371.5 Shale.

371.5 387.4 Sandstone.

387.4 392.8 Shale.

392.8 395.5 Coaly shale.

395.5 432.4 Coal.

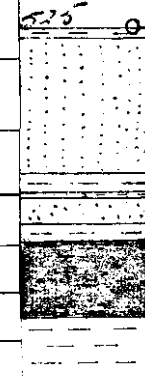
432.4 450 Shale.

450 455 Black shale.

40 Scale

Color Plot & Dips

Ore Classes & Aver.



600

Core Size

4 1/2"

Hole No.

R.H. 144

Page

2

# Diamond Drill Geological Log



K-FORGING 70(3)A-2

McAULEY DRILLING COMPANY

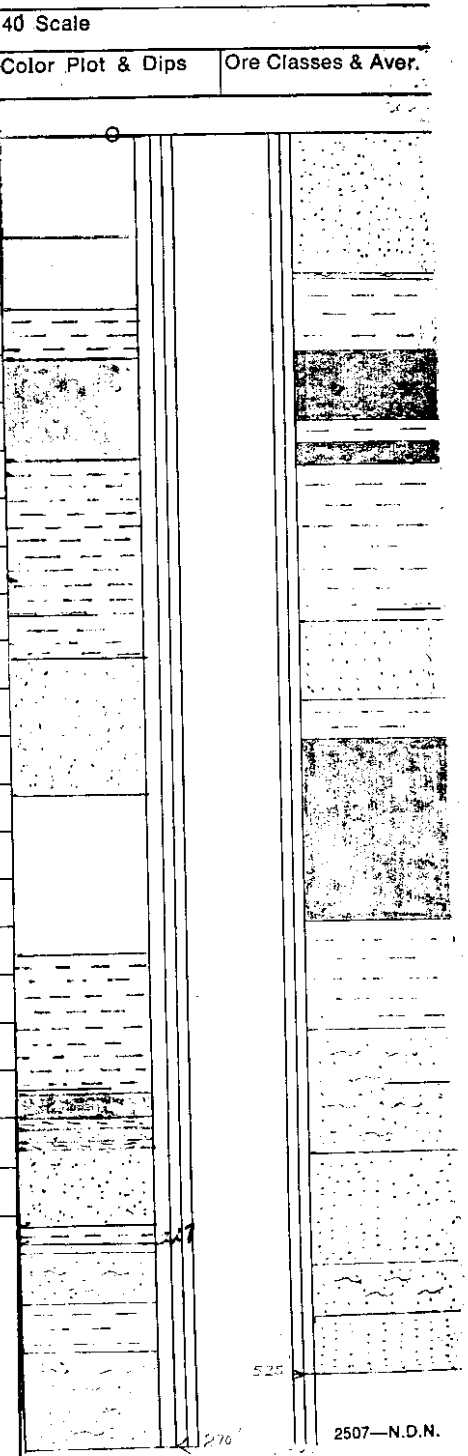
Objective:		Sampled:		312		40 Scale	
Logged By: W.E. PEARSON		Date: FEBRUARY, 1970				Color Plot & Dips	
Block:		Sect.:		Place: Greenhills		App. Dip.:	
				App. Bear:		Length:	

From	To	Discard:	Reason:
0	20	Overburden.	Revised by radiation log
20	35	Siltstone.	
35	45.5	Black shale.	
45.5	66.5	Coal.	Seam F 43.5 - 64.0 Good coal, shale 56-58.0
66.5	68	B lack shale.	
68	69	Coal stringers in shale.	
69	72	Carbonaceous shale.	
72	75	Shale.	
75	90	B lack shale.	88-93 Carbonaceous shale
90	105	Shale.	
105	106.5	Shale.	
106.5	135	Hard sandstone.	
135	168.5	Siltstone.	
168.5	185.5	Black shale.	
185.5	188.6	Shale, coal stringers.	
188.6	195	Carbonaceous shale.	
195	197.5	Shale.	
197.5	201.4	Coal.	No
201.4	203	Shale.	
203	206	Sandstone, hard.	
206	207.5	Shale.	
207.5	223	Sandstone.	
223	227	Hard shale.	

Core Size  
4 1/2 " Rock Bit

Hole No. R.H. 144

Page  
1



# Diamond Drill Geological Log



McAULEY DRILLING COMPANY

Objective: S.B. BUTRENUK

Sampled:

Logged By: W.E. PEARSON

Date: FEBRUARY, 1970

Composites:

Block: Sect.: Place: App. Bear: App.: Dip.: Length:  
N. GREENHILLS

From	To	Discard:	Reason:
455	460	Siltstone.	
460	465	Siltstone, very hard.	
465	480	Siltstone, very hard.	
480	495.4	Sandstone, hard.	
495.4	499	Interbedded shale and sandstone.	
499	503.5	Sandstone, hard.	
503.5	510	Siltstone.	
510	514	Siltstone.	
514	525	Sandstone, very hard.	
525	527	Black shale.	
527	541	Sandstone	
541	555	Sandstone, very hard.	
555	559	Shale.	
559	560	Interbedded shale and sandstone.	
560	565.2	Sandstone.	
565.2	568.8	Shale with carbonaceous shale.	
568.8	580.5	Soft coal with carbonaceous shale.	
580.5	585	Hard coal.	
585.	600	Shale.	

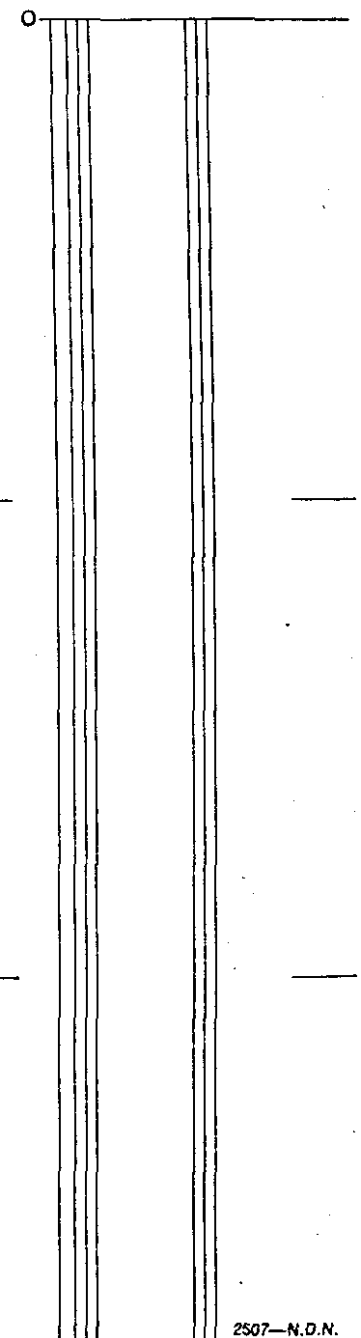
End of hole.

Core Size  
4 1/2"

Hole No.  
R.H. 144

Page  
3

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



# Diamond Drill Geological Log

McAULEY DRILLING COMPANY.



K-FORGING 70(3)A-2

Objective:

Sampled:

Logged By: S.B. BUTRECHUK

Date: FEBRUARY, 1970

Composites:

312

Block:

Sect.:

Place:

App. Bear:

App.: Dip.:

Length:

GREENHILLS

From	To	Discard:	Reason:
0	10	Clay.	
10	15	Shattered rock,	
15	17	Shattered rock.	
17	20	Sliding sandstone.	
20	25	Sliding sandstone.	
25	30	Black shale.	
30	38	Sandstone.	
38	40	Sandstone, very hard.	
40	41.8	Sandstone, very hard.	
41.8	49	Hard sandstone.	
49	53.5	Coal.	
53.5	75	Hard shale.	

**NOT SAMPLED  
- SINGLE WALL PIPE**

Hole abandoned - casing twisted off at 12 feet. Located new hole 10 feet west.

Core Size

4 1/2"

Hole No.

R.H. 145

Page

1

40 Scale

Color Plot & Dips

Ore Classes & Aver.

# Diamond Drill Geological Log



McAuley Drilling Co.

Objective:

Sampled:

40 Scale  
20  
Color Plot & Dips    Ore Classes & Aver.

Logged By: S.B. Butrenchuk

Date: February, 1970

Composites:

Block:                      Sect.:                      Place:                      App. Bear:                      App.: Dip.:                      Length:

M. Greenhills

From    To    Discard:                      Reason:

0	10	Clay	
10	15	Shattered rock	
15	17	Shattered rock	
17	20	Sandstone	
20	28	Sandstone	
28	33	Black Shale	
33	39	Shale	
39	44	Coal	38-42°, Fair Coal, F <sub>2</sub> Seam
44	50	Shale	
50	56.2	Sandstone	
56.2	69.4	Shale	
69.4	75.5	Coal	69.5-71.5, Poor Coal, F <sub>1</sub> Seam
75.5	111.2	Shale	
111.2	113	Coaly Shale	111.0-136.0 "F" Seam, good quality, 129-131.0 shale
113	123.5	Coal	
123.5	135	Shale	
135	141	Black Shale	
141	145	Sandstone - very hard	
145	150	Sandstone - very hard	
150	165	Sandstone	
165	170.5	Siltstone - hard	
170.5	173	Siltstone	
173	178	Coal	

*Revised by radiation log*

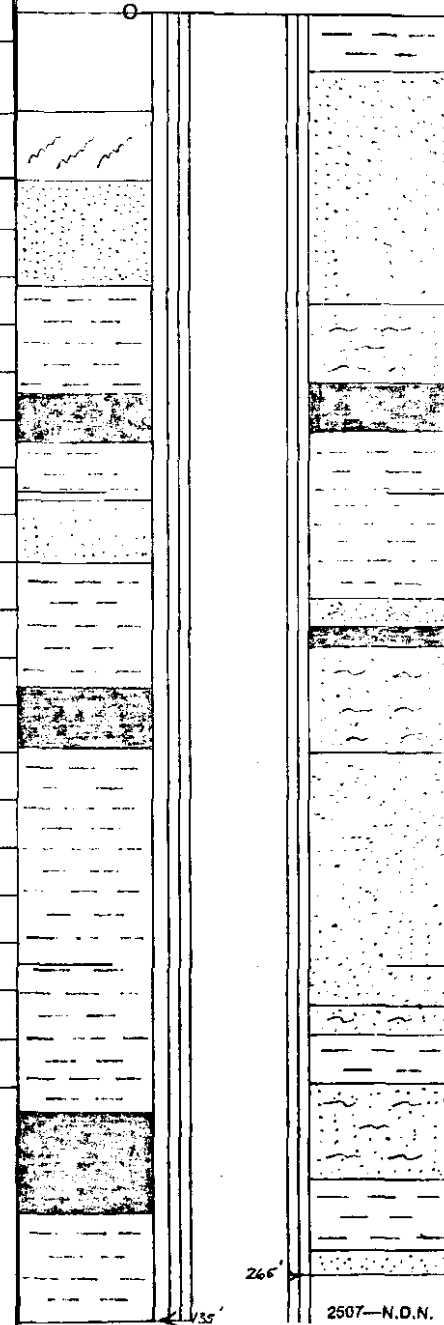
**NOT SAMPLED**

**- SINGLE WALL PIPE**

Core Size    4 1/2"

Hole No.    RH 145A

Page    1



# Diamond Drill Geological Log



McAuley Drilling Co.

Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

Logged By: S.B. Butrenchuk Date: February, 1970 Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: Greenhills App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

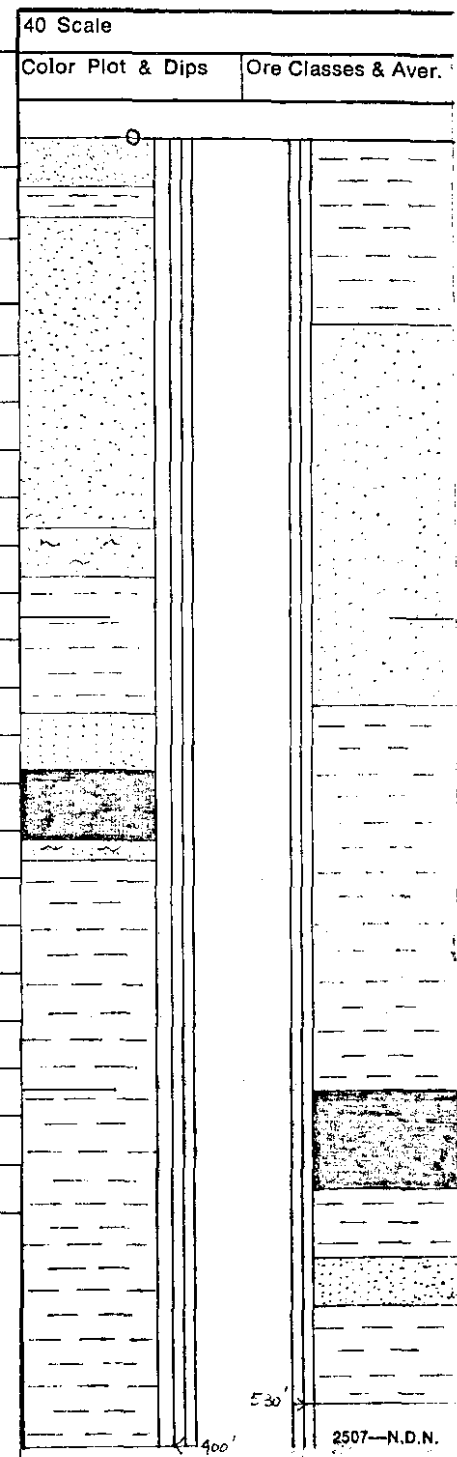
From To Discard: Reason: \_\_\_\_\_

178	180	Black Shale	
180	195	Black Shale - hard	
195	198	Siltstone	
198	200	Coal	
200	203	Siltstone	
203	210	Siltstone	
210	211	Siltstone	
211	237	Sandstone - hard	
237	240	Siltstone	
240	242	Carbonaceous Shale	
242	245	Carbonaceous Shale	
245	255	Siltstone	
255	261	Carbonaceous Shale	
261	262.5	Carbonaceous Shale	
262.5	270	Sandstone - very hard	
270	273	Carbonaceous Shale	
273	305	Sandstone - very hard	
305	310	Siltstone - hard	
310	315	Carbonaceous Shale	
315	324	Carbonaceous Shale	
324	330	Sandstone - very hard	
330	335	Coal <i>No, shale</i>	
335	337	Coal <i>No, shale</i>	

Core Size  
**4 1/2"**

Hole No. **RH 145A**

Page **2**



530'

400'

2507-N.D.N.



# Diamond Drill Geological Log



McAuley Drilling Co.

Objective:

Sampled:

40 Scale

Color Plot & Dips

Ore Classes & Aver.

Logged By: S.B. Butrenchuk

Date: March, 1970

Composites:

Block:

Sect.:

Place:

App. Bear:

App. Dip:

Length:

Greenhills

From To Discard: Reason:

337	339	Siltstone	
339	345	Black Shale	
345	350	Carbonaceous Shale	Possible Fault @ 350.0, very high gamma ray.
350	360	Black Shale	
360	365	Black Shale	
365	375	Black Shale	
375	377	Black Shale	
377	419	Shale	
419	447	Sandstone	
447	450	Sandstone	
450	454	Sandstone - hard	
454	458	Sandstone - hard	
458	465	Black Shale	
465	480	Black Shale	468-470 Poor Coal
480	483	Carbonaceous Shale	
483	488	Black Shale	
488	495	Black Shale	
495	498	Black Shale	
498	506	Coal	492-504.0 Good Coal "E" Seam
506	508	Coal	
508	510	Carbonaceous Shale	
510	515	Black Shale	
515	520	Sandstone	

Core Size

4 1/2"

Hole No. RH 145A

Page 3

630'

# Diamond Drill Geological Log



McAuley Drilling Co.

Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_  
 Color Plot & Dips \_\_\_\_\_ Ore Classes & Aver. \_\_\_\_\_

Logged By: S.B. Butrenchuk Date: March, 1970

Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: **Greenhills** App. Bear: \_\_\_\_\_ App.: Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

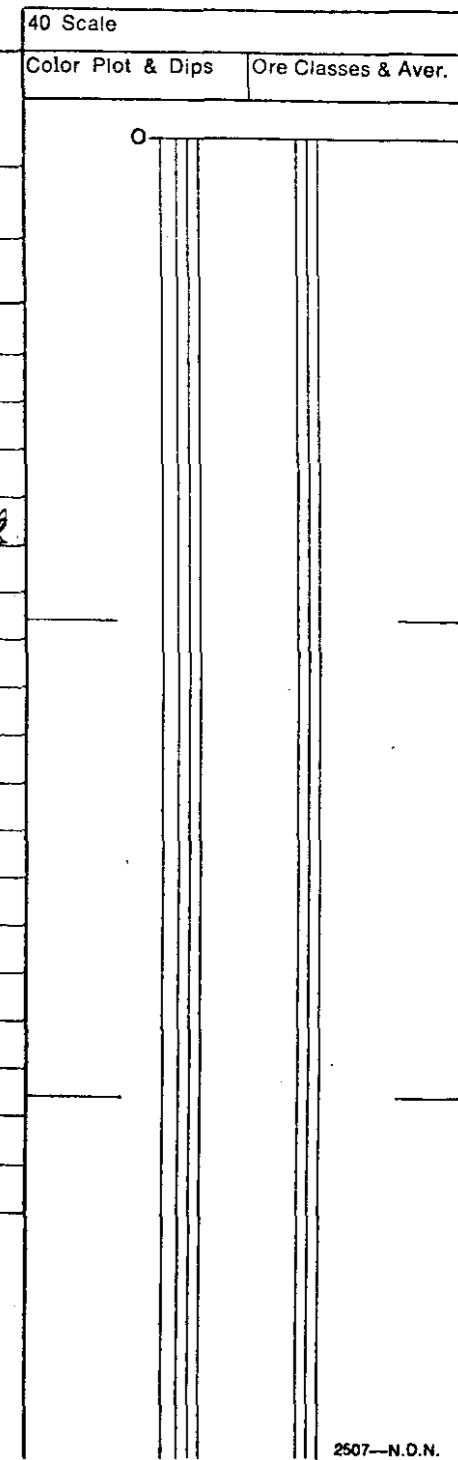
From	To	Discard:	Reason:
520	530	Shale	
530	583.5	Coal	524 - 561 Good coal Seam "D"
583.5	585	Shale	529 - 531 shaly
585	597	Coal	
597	600.5	Shale	561 - 563 shale, 563 → apparently coal
600.5	608	Coal	
608	611.5	Sandstone	
611.5	615	Coal	
615	615.5	Carbonaceous Shale	
615.5	621	Sandstone - hard	
621	630	Sandstone	

630' - End of hole

Core Size 4 1/2"

Hole No. RH 145A

Page 4



# Diamond Drill Geological Log

MaAuley Drilling Co.



K-FORDING 70(3)A-2

Objective:

Sampled:

Logged By: **S.B. Butrenchuk** Date: **March, 1970**

Composites:

**312**

Block: Sect: Place: **Greenhills** App. Bear: App. Dip: Length:

From To Discard: Reason:

0	8	Clay	
8	18	Gravel	
18	30	Clay	
30	33	Gravel	
33	37	Clay	
37	40	Sandstone	
40	44	Shale	
44	63.5	Sandstone	
63.5	65.8	Shaley Coal (Carbonaceous Shale)	<i>62-64 shaly coal, upper type seam</i>
65.8	72.8	Shale	
72.8	80	Sandstone	
80	90.5	Shale	
90.5	117	Interbedded Shale and Sandstone	<i>91-96.5 poor quality coal</i>
117	120	Sandstone	<i>102.0 - 109.0 Good quality coal, Seam 6?</i>
120	128	Black Shale	
128	130	Black Shale	
130	135	Sandstone - very hard	
135	141	Sandstone	
141	143	Sandstone	
143	144	Sandstone	
144	146	Sandstone - very hard	
146	148	Sandstone	
148	179.5	Hard Sandstone	

*Revised by Gamma-Neutron Log*

**NOT SAMPLED  
- SINGLE WALL PIPE**

Core Size

**4 1/2"**

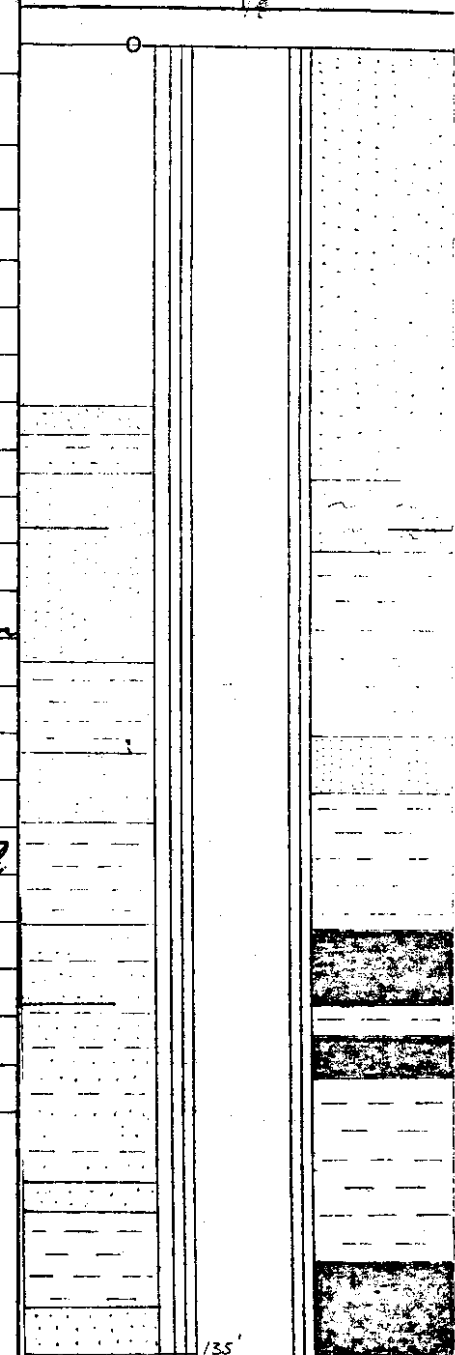
Hole No.

**RH 146**

Page

**1**

Scale  
Color Plot & Dips  
Ore Classes & Aver.



# Diamond Drill Geological Log



McAuley Drilling Co.

20 Scale

Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_ Color Plot & Dips \_\_\_\_\_ Ore Classes & Aver. \_\_\_\_\_

Logged By: S.B. Butrenchuk Date: March 1970 Composites: \_\_\_\_\_ 270°

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: Greenhills App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From To Discard: Reason: \_\_\_\_\_

179.5 180 Siltstone  
183 Siltstone

**NOT SAMPLED  
GLE WALL PIPE**

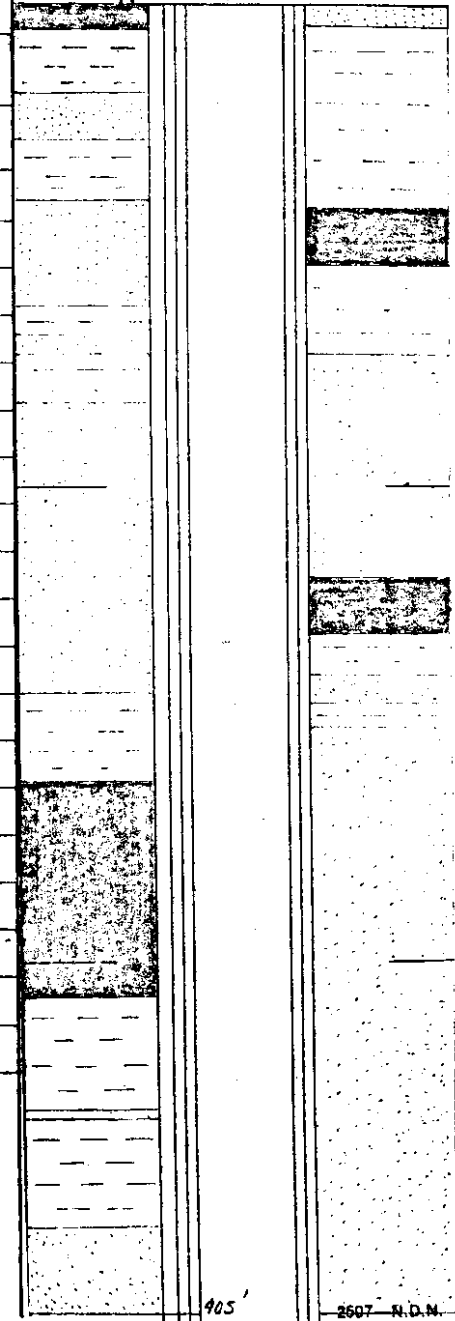
195  
199 203 Black Shale  
203 206 Black Shale  
206 210 Sandstone  
210 212 Sandstone  
212 215 Black Shale  
215 225 Black Shale  
225 226 Black Shale  
226 230 Coal  
230 234 Coal  
234 235 Black Shale  
235 237 Coal imbedded in Shale  
237 240 Coal  
240 241.5 Coal  
241.5 245 Coal imbedded in Shale  
245 248 Black Shale  
248 252 Black Shale  
252 255 Black Shale

*F<sub>3</sub>? 222-231 Coal, dirty 222-225°  
rest fair quality*

Core Size 4 1/2"

Hole No. RH 146

Page 2



# Diamond Drill Geological Log

McAuley Drilling Co.



Objective:			Sampled:			40 Scale	
Logged By: S.B. Butrenchuk			Date: March 1970			Color Plot & Dips	
Block:			Composites:			Ore Classes & Aver.	
Sect.:		Place: Greenhills		App. Bear:		App. Dip:	
Length:							
From	To	Discard:	Reason:				
255	257	Carbonaceous Shale	F 2? 256.5 - 268.0 Coal, 263-266° shaly				
257	260	Black Shale					
260	261	Coal					
261	262	Coaly Shale					
262	267	Coal					
267	268	Coal with carbonaceous Shale					
268	268.5	Shaley Coal					
268.5	272.5	Coal					
272.5	279	Shale					
279	284	Sandstone -fine grained					
284	290	Shale					
290	301.5	Sandstone (fine-grained)					
301.5	304	Shale					
304	306	Sandstone (fine-grained)					
306	311	Shale					
311	312.5	Sandstone (fine-grained)					
312.5	315	Sandstone	F1 314-319.0 Coal, poor quality				
315	317	Sandstone					
317	320	Sandstone	All upper type seams to here				
320	322	Broken Sandstone	shaly coal with				
322	325	Broken Sandstone	interbedded s.s.				
325	330	Very Hard Sandstone					
330	335	Sandstone					

Core Size

4 1/2"

Hole No.

RH 146

Page

3

# Diamond Drill Geological Log

McAuley Drilling Co.



Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_ Color Plot & Dips \_\_\_\_\_ Ore Classes & Aver. \_\_\_\_\_

Logged By: **S.B. Butrenchuk** Date: **March 1970** Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: **Greenhills** App. Bear: \_\_\_\_\_ App.: Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

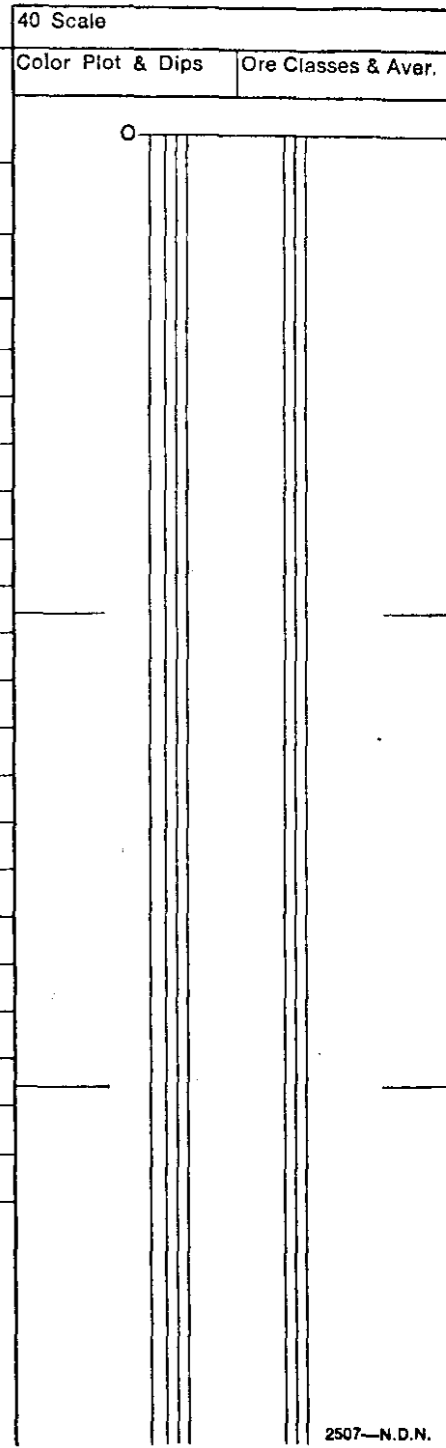
From \_\_\_\_\_ To \_\_\_\_\_ Discard: \_\_\_\_\_ Reason: \_\_\_\_\_

335	337	Sandstone	
337	341	Sandstone	
341	345	Coal imbedded in shale	
345	347.5	Coal imbedded in Shale	
347.5	350	Black Shale	
350	360	Coal	347 - 368 Good quality, Seam F
360	362	Coal	
362	372	Coal	
372	375	Black Shale	
375	380	Black Shale	
380	381	Black Shale	
381	384.5	Black Shale	
384.5	385	Sandstone	
385	396	Shale	
396	407	Sandstone (fine-grained)	
407	426	Shale	
426	429	Shaley Coal	
429	432	Coal	
432	435	Coal imbedded in shale	
435	441	Coal imbedded in shale	
441	444	Sandstone	
444	450	Sandstone	
450	452	Sandstone	

Core Size  $4\frac{1}{2}''$

Hole No. **RH 146**

Page **4**





# Diamond Drill Geological Log



K-FIELDING 70(3)A-2

ALPINE DRILLING COMPANY

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.

Objective:

Sampled:

312

Logged By: S.B. BUTRENCHUK      Date: FEBRUARY, 1970

Composites:

Block:

Sect.:

Place:  
NORTH GREENHILLS

App. Bear:

App.: Dip.:

Length:

From      To      Discard:      Reason:

0	17	Overburden.	
17	22	Sandstone.	
22	75	Shale.	
75	100	Coal.	
100	138	Shattered shale.	
138	144	Coal.	
144	163	Dark shale, hard.	
163	172	Shale.	
172	220	Sandstone.	
220	256	Sandstone - shale stringers.	
256	290	Hard sandstone.	

**NOT SAMPLED  
- SINGLE WALL PIPE**

290 - hole abandoned.  
Redrill - Hole 147A - 25 feet east of 147.

Core Size  
Hole No.      Page  
RH 147      1



# Diamond Drill Geological Log



Alpine Drilling Co.

Objective:

Sampled:

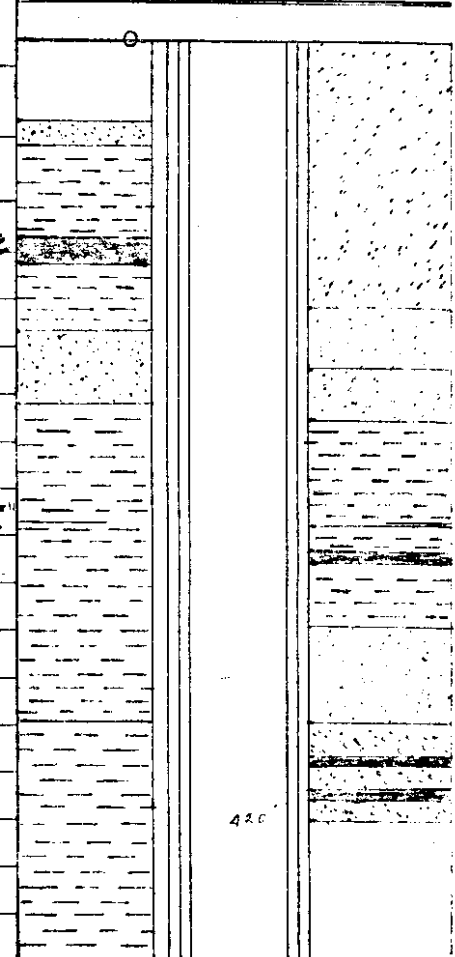
Logged By: S.B. Butrenchuk Date: March, 1970

Composites:

Block: Sect.: Place: Greenhills App. Bear: App. Dip.: Length:

From	To	Discard:	Reason:
0	17	Clay and rock -overburden	Revised by Gamma-Neutron Log
17	22	Sandstone	
22	41	Shale	
41	46	Coal	43 - 48.° Dirty Coal, v poor quality
46	60	Shale and Clay	
60	75	Rock - probably sandstone	
75	140	Shale	98.5 - 117.° Coal, shaly 103-110.°, upper seam E
140	200	Hard shale - at 144' - small fracture - 177-188 - 6' sandstone layer	not identified
200	240		
240	260	Sandstone	
260	315	Sandstone and shale	
315	338	Hard sandstone	332 - 346.5 Good coal Seam D
338	360	Soft shale	350.5 - 353.5 poor coal
360	365	Shale	356 - 358.° carb shale
365	367	Coal	
367	380	Shale	
380	400	Sandstone	
400	407	Sandstone	
407	408.5	Coal	
408.5	414	Sandstone	
414	416	Coal	
416	420	Sandstone	

40 Scale  
Color Plot & Dips Ore Classes & Aver.



**NOT SAMPLED**  
**- SINGLE WALL PIPE**

Core Size 4 1/2"  
Hole No. RH147A Page 1

260

# Diamond Drill Geological Log

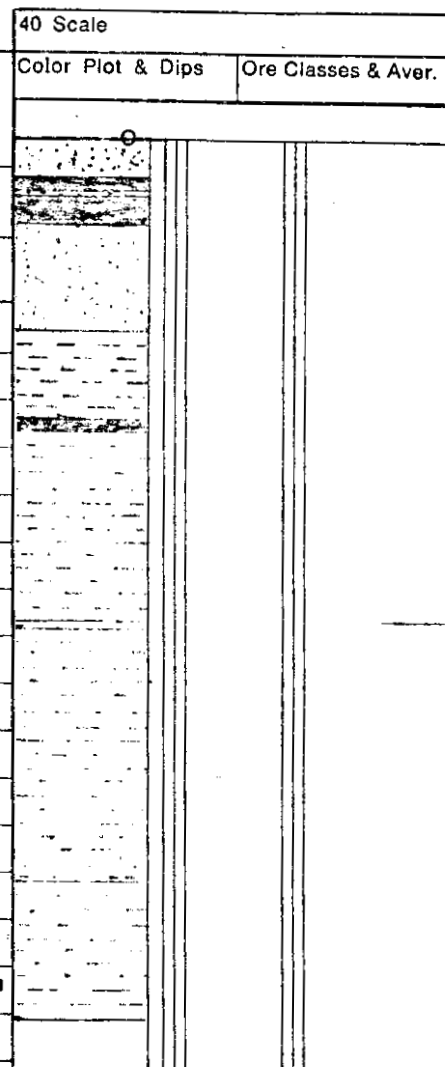


Alpine Drilling Co.

Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_ 40 Scale  
 Logged By: W.E. Pearson Date: March 1970 Composites: \_\_\_\_\_ Color Plot & Dips Ore Classes & Aver.

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: Greenhills App. Bear: \_\_\_\_\_ App.: Dip.: \_\_\_\_\_ Length: 420'  
 From To Discard Reason:

From	To	Discard	Reason
420	428	Sandstone	
428	430	Coal	
430	431	Sandstone	
431	437	Coal	
437	440	Sandstone	
440	459	Sandstone	
459	477	Black Shale	
477	479	Coal	
479	520	Dark Shale	
520	572	Shale Traces of Coal	
572	600	Shale	
		End Hole	



600'

**NOT SAMPLED  
 - SINGLE WALL PIPE**

Core Size 4 1/2"

Hole No. RH 147A

Page 2

# Diamond Drill Geological Log



K-FAROTING 70(3)A-2

McAnley Drilling Co.

Objective:

Sampled:

312

Logged By: S.B. Butrenchuk

Date: April, 1970

Composites:

Block:

Sect.:

Place:

App. Bear:

App. Dip.:

Length:

Greenhills

From To Discard:

Reason:

Revised by radiation log.

0	10.5	Shale
10.5	14	Coal
14	29	Shale
29	30	Sandstone
30	35	Shale
35	44	Sandstone (fine-grained)
44	47	Shale
47	49.5	Sandstone (fine-grained)
49.5	55	Shale
55	58.5	Sandstone
58.5	59	Shale
59	60	Sandstone
60	75	Sandstone
75	90	Sandstone
90	105	Sandstone
105	124.5	Sandstone-hard
124.5	130	Sandstone-very hard
130	135	Sandstone
135	142	Sandstone
142	144	Sandstone-streaks of coal
144	155.5	Sandstone
155.5	170	Sandstone
170	180	Sandstone

Hole No. _____	Elev. _____
Lat. _____	Dep. _____
	Elev. Th.
Top of <u>F</u>	@ <u>5571.7</u>   <u>13.5'</u>
Top of <u>D</u>	@ <u>5422</u>   <u>11'</u>
Top of <u>D</u>	@ <u>5383</u>   <u>17'</u>
Top of _____	@ _____   _____

**NOT SAMPLED**  
**- SINGLE WALL PIPE**

Core Size 4 1/2"  
Hole No. R.H. 148

40 Scale

Color Plot & Dip

Ore Classes & Anal.

35'

20'

# Diamond Drill Geological Log



McAuley Drilling Co.

Objective:

Sampled:

Logged By: S.B. Butrenchuk

Date: April, 1970

Composites:

Block:

Sect.:

Place:

Greenhills

App. Bear:

App.: Dip.:

Length:

From To Discard Reason:

180	184	Shale	
184	190	Sandstone - fine grained	
190	193.5	Shale	
193.5	209	Sandstone - fine grained	
209	218	Shale	
218	227	Sandstone - fine grained	
227	235	Shale	
235	237.5	Sandstone	
237.5	244.5	Shale	
244.5	256.5	Sandstone	
256.5	295	Sandstone	
295	305	Coal	295.0 - 316.0
305	307	Carbonaceous Shale	
307	322	Coal	
322	325	Carbonaceous Shale	
325	330	Black Shale	
330	334	Sandstone	
334	340.5	Shale	
340.5	346	Sandstone	
346	351	Shale	
351	362	Sandstone	
362	378.5	Shale	
378.5	384	Sandstone	

**NOT SAMPLED  
- SINGLE WALL PIPE**

Core Size 4 1/2"

Hole No. R.H. 148

Page 2

27.0

Color Plot & Dip One Class @ Aver.

405'

535' End

1007-N.D.N.

# Diamond Drill Geological Log



McAuley Drilling Co.

Objective:

Sampled:

40 Scale  
Color Plot & Dips    Ore Classes & Aver.

Logged By: S.B. Butrenchuk    Date: April, 1970

Composites:

Block:    Sect.:    Place: **Greenhills**    App. Bear:    App. Dip.:    Length:

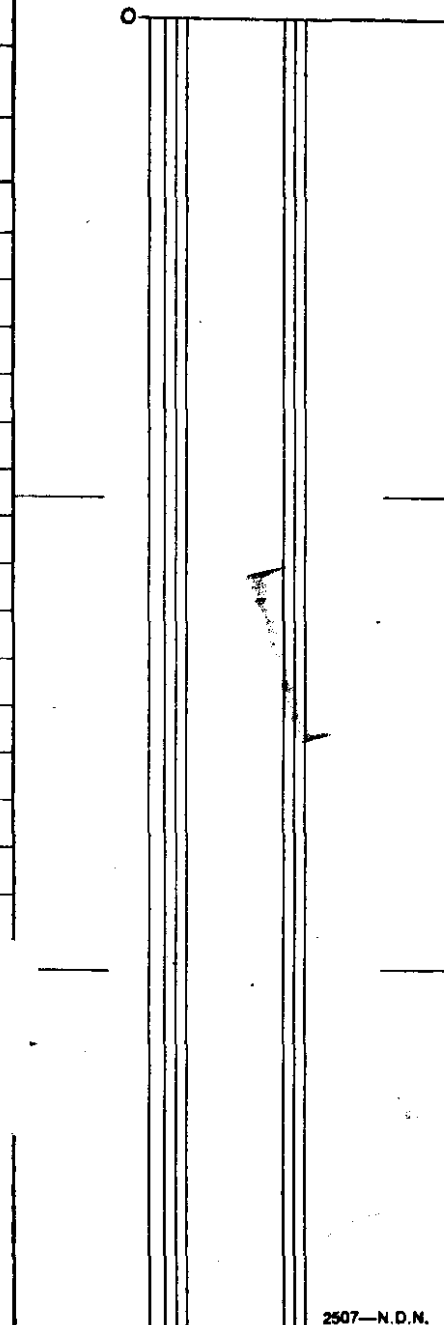
From	To	Discard:	Reason:
384	405	Sandstone	
405	420	Sandstone	
420	422	Black Shale	
422	435	Coal	
435	444	Coaly Shale	
444	449	Sandstone	
449	452	Shale	
452	461	Sandstone	
461	483.5	Shale	
483.5	490	Coal	
490	497	Shale	
497	500	Sandstone	
500	505	Black Shale	
505	535	Sandstone - Very Hard	

535' End of hole

**NOT SAMPLED  
- SINGLE WALL PIPE**

Core Size  $4\frac{1}{2}$ "

Hole No. R.H. 148    Page 3



# Diamond Drill Geological Log



K-FAROEING 70(3)A-2

Becker Drilling Co.

Objective:

Sampled:

312

Logged By: W. E. Pearson

Date: May, 1970

Composites:

Block:

Sect.:

Place:

App. Bear:

App.: Dip.:

Length:

Greenhills

From To Discard: Reason:

Revised by radiation log

0	9	Coal	
9	10	Shale	
10	52	Sandstone Shale Layers	
52	54	Coal	52 86 52.5-68.0
54	55	Shale	
55	63	Coal	5287 & 5294
63	80	Shale	
80	120	Sandstone Shale Layers	
120	123	Shale	
123	130	Sandstone	
130	131	Shale	
131	170	Sandstone	Coal Stringer at 170'
170	173	Sandstone	
173	174	Shale	
174	184	Sandstone	
184	193	Shale	
193	239	Sandstone	
239	244	Shale	
244	259	Sandstone	
259	280	Shale Coal Traces	
280	328	Shale	
328	354	Shale Clay	
355	374	Shale	

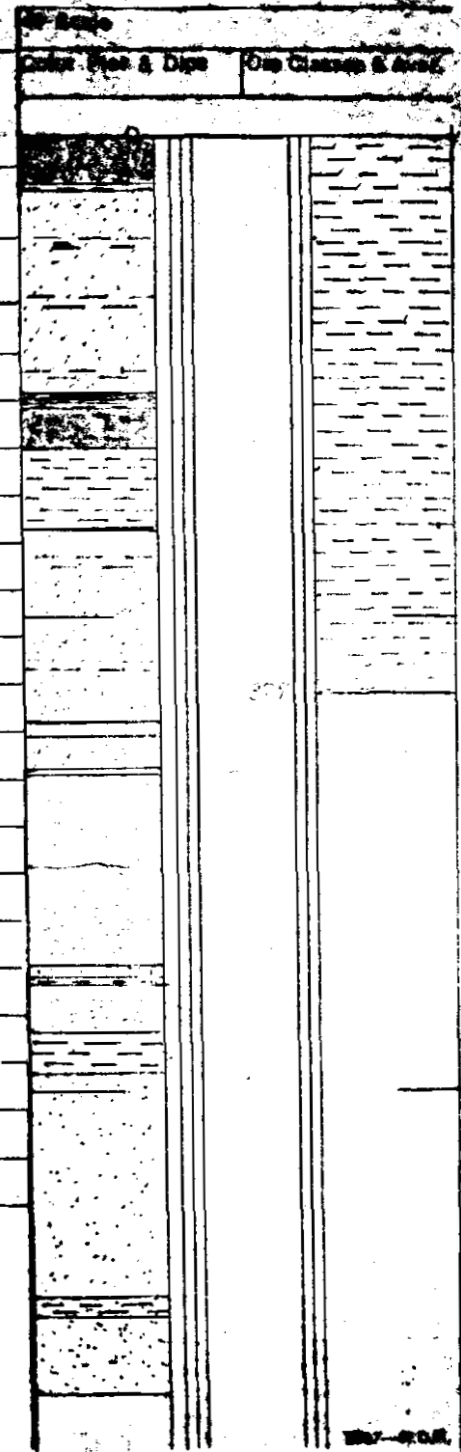
NOT SAMPLED  
- SINGLE WALL PIPE

Core Size

3 7/8

Hole No. RH 149

Page 1



100-1000

# Diamond Drill Geological Log



Becker Drilling Co.

Objective:

Sampled:

Logged By: **W. E. Pearson**

Date: **May, 1970**

Composites:

Block:

Sect.:

Place:

**Greenhills**

App. Bear:

App. Dip.:

Length:

From To Discard:

Reason:

374	405	Coal	5288 - 93
405	414	Shale	
414	420	Sandstone	
420	424	Shale	
424	440	Sandstone	
440	457	Sandstone	
457	488	Shale	trace coal

End hole

NOT SAMPLED  
- SINGLE WALL PIPE

Core Size 3 7/8

Hole No. RH 149

Page 2

Color Part & Dip

Core Classes & Avon

FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION		SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
55.0	63.0	Seam "Lower 'F'?"	RAW COAL					0.3	22.9	21.4	55.4	5½, 5½, 6	0.58	
			CLEAN COAL					0.7	7.7	23.9	67.7	8, 8, 8	0.68	66.1 % Clean Coal Recovery
374.0	405.0	Seam "E"	RAW COAL					0.2	32.0	20.1	47.7	5, 5, 5	0.30	
			CLEAN COAL					0.6	11.8	23.1	64.6	7½, 7, 7½	0.41	65.8 % Clean Coal Recovery

NOT SAMPLED



# Diamond Drill Geological Log



K-forecasting 70(3)A-2

McAuley Drilling Co.

20 Scale

Objective:

Sampled:

312

Color Plot & Dip Ore Classes & Aver.

Logged By: S. B. Butrenchuk Date: April, 1970

Composites:

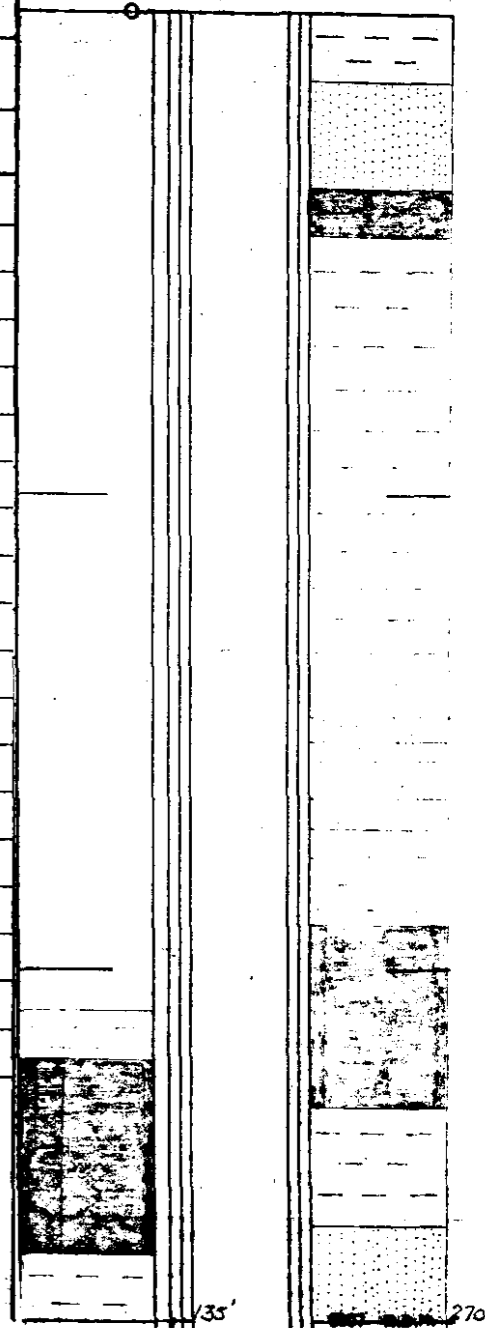
Block: Sect.: Place: N. Greenhills App. Bear: App. Dip.: Length:

From	To	Discard:	Reason:
0	10	Clay	
10	22	Gravel	
22	34	Clay	
34	38	Gravel	
38	45	Clay	
45	58	Clay	
58	61	Gravel	
61	103	Clay	
103	105	Shale	
105	108	Shale	
108	128	Soft Coal (Carbonaceous Shale)	107.0-126.0
128	142	Shale	
142	153	Sandstone	
153	158	Soft Coal (Carbonaceous Shale)	150.0-154.0
158	207.5	Shale	
207.5	210	Sandstone	
210	216	Shale	
216	219	Sandstone	
219	222	Shale	219.0-228.0
222	229	Black Shale	
229	232	Coal Imbedded in Shale	
232	243	Coal	
243	244.5	Coal imbedded in Shale	

Revised by Radiation log

Hole No. 1150 Elev. 5092.6  
 Lat. 49 12.3 Dep. 74 297.7  
 Elev. Th.  
 Top of F<sub>1</sub> @ 5224.1 | 1.0'  
 Top of F<sub>2</sub> @ 5213.6 | 4.0'  
 Top of E? @ 5193 | 2.0'  
 Top of \_\_\_\_\_ @ \_\_\_\_\_ | \_\_\_\_\_'

Core Size  
4 1/2"  
Hole No. RH 150



35' 270'

# Diamond Drill Geological Log



McAuley Drilling Co.

20

Objective:

Sampled:

Color Plot & Dip

Core Classes & Aver.

Logged By: S. B. Butrenchuk

Date: April, 1970

Composites:

Block: Sect.: Place: N. Greenhills App. Bear: App. Dip: Length:

From	To	Discard:	Reason:
<del>244.5</del>	248	Coal	
248	250	Black Shale	
250	260	Coal imbedded in Shale	
260	275	Sandstone	267.0 - 272.0
275	282	Black Shale	
<del>282</del>	295	Coal	
295	314	Sandstone	
314	315	Coaly Shale	
315	320	Sandstone	
320	340	Sandstone	
340	345	Sandstone	
345	350	Black Shale	
<del>350</del>	370	Coal	350.0 - 360.0
370	373	Carbonaceous Shale	
<del>373</del>	384	Coal	370.0 - 376.0
384	385	Black Shale	
385	405	Sandstone	
405	410	Black Shale	
410	412.5	Black Shale	
412.5	422	Sandstone	
422	430	Shale	
430	441.5	Coal	430.0 - 436.0 Coal 428.5 - 438 } F <sub>2</sub>
441.5	447	Sandstone	

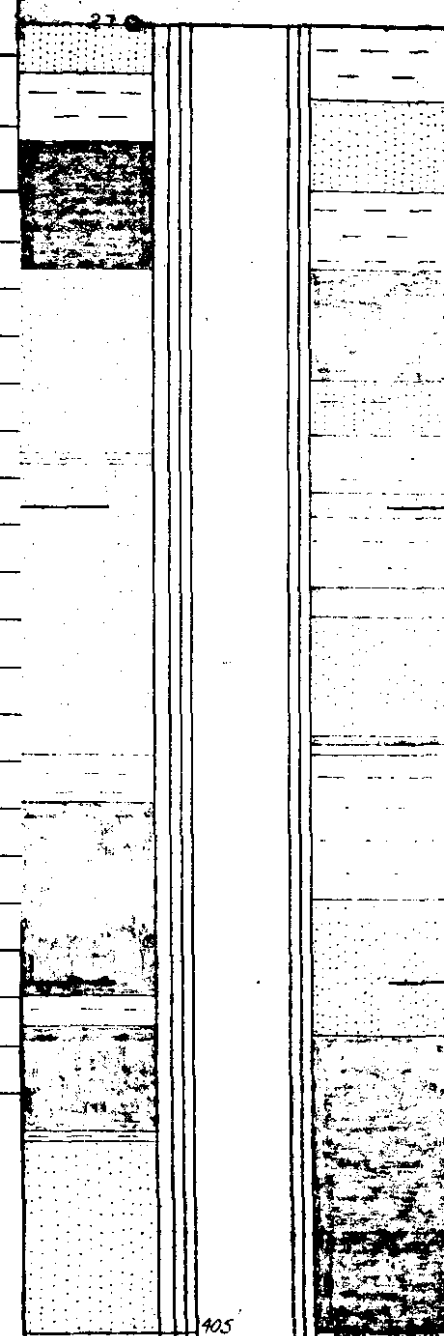
Core Size

4 1/2"n

Hole No.

RE 150

Page 2



405

540'

# Diamond Drill Geological Log



McAuley Drilling Co.

Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

Logged By: **S.B. Butrenchuk** Date: **April, 1970** Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: **N. Greenhills** App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From	To	Discard:	Reason:
447	453	Shale	
453	455.5	Sandstone	
455.5	463	Shale	<i>454.0 - 457.0</i>
463	465.5	Coal	
465.5	478.2	Sandstone (fine-grained)	
478.2	479	Coal	
479	480	Sandstone	<i>479.0 - 482.0</i>
480	482	Coal imbedded in Shale	
482	495	Coal imbedded in Shale	
495	504	Sandstone	
504	540	Coal	<i>500.0 - 580.0</i>
540	542.5	Coal imbedded in shale	
542.5	555.5	Shale	
555.5	570	Sandstone	
570	575	Sandstone	
575	585	Sandstone	
585	600	Sandstone	

600' End of hole

Core Size **4½"**

Hole No. **RH 150**

Page **3**

40 Scale

Color Plot & Dip

One Classes & Aver.

540

600' End

# Diamond Drill Geological Log



K-FROING 70(3)A-2

McAULEY DRILLING COMPANY

312

Objective:

Sampled:

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.

Logged By: S.B. BUTRENCHUK

Date: FEBRUARY, 1970

Composites:

Block:

Sect.:

Place: Green hills

App. Bear:

App. Dip.:

Length:

From	To	Discard:	Reason:
0	5	Clay and rocks.	Revised by Gamma-Neutron Log
5	27	Fractured shale and sandstone.	
27	33	Sliding shale - bedrock.	
33	35	Fractured shale.	
35	49	Shale.	
49	53	Sandstone, very hard.	42-62 Sandstone
53	54	Shale.	
54	62	Siltstone.	
62	70	Siltstone.	
70	75	Siltstone.	
75	90	Hard sandstone.	
90	105	Hard sandstone.	
105	107	Sandstone.	
107	109	Coal interbedded with shale.	
109	112	Carbonaceous shale.	
112	120	Hard shale.	
120	125	Shale layers with sandstone.	
125	161.6	Shale.	
161.6	178.4	Sandstone	
178.4	182.6	Shale.	
182.6	191	Sandstone.	
191	193	Sandstone, very hard.	
193	195	Hard sandstone.	

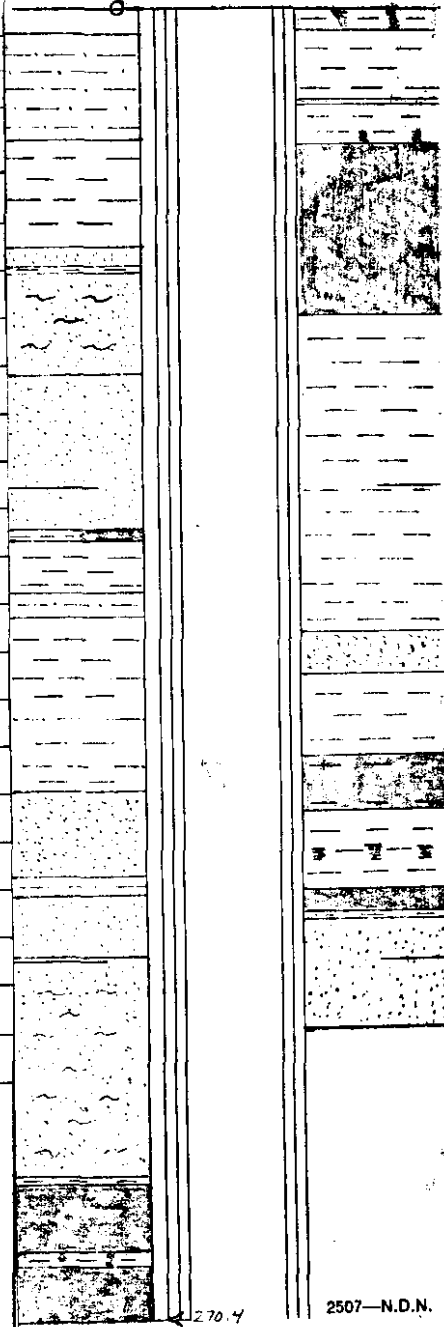
Core Size

Hole No.

R.H. 151

Page

1



# Diamond Drill Geological Log



McAULEY DRILLING COMPANY

40 Scale

Objective:

Sampled:

Color Plot & Dips

Ore Classes & Aver.

Logged By: S. BUTRENUK

Date: FEBRUARY, 1970

Composites:

Block:

Sect.:

Place:

App. Bear:

App.: Dip.:

Length:

From To Discard: Reason:

195	201	Siltstone.	
201	205	Siltstone.	
205	210	Siltstone.	
210	225	Siltstone.	
225	240	Siltstone.	
240	241.5	Shale.	
241.5	256	Coal - some soft.	236 - 242.0 Dirty coal, 242 - 264 Good coal
256	258.5	Coaly shale.	shaley 246 - 249, 251 - 253.0, 256 - 257.5
258.5	263.5	Coal - soft with carbonaceous shale.	264 - 269 shale
263.5	270.4	Coal - slightly harder.	
270.4	274	Coaly shale.	
274	289.4	Shale.	
289.4	290.8	Sandstone.	
290.8	295.5	Shale.	
295.5	298	Coaly shale.	
298	306	Shaley coal.	
306	312	Coal, soft with carbonaceous shale.	306 - 339.0 Coal, good quality Seam "D" upper
312	333.4	Coal.	Shaley 320 - 322.5, 332.5 - 334.5
333.4	345	Shale.	
345	354	Black shale.	
354	360	Black shale.	lower "D" { 354 - 356.5 coal fair quality 356.5 - 358.5 shale
360	370	Hard shale.	{ 358.5 - 360 coal dirty
370	375	Hard shale.	

Core Size

Hole No.

Page

R.H. 151

2

# Diamond Drill Geological Log



McAULEY DRILLING COMPANY

40 Scale

Objective:

Sampled:

Color Plot & Dips

Ore Classes & Aver.

Logged By: S. BUTRECHUK

Date: FEBRUARY, 1970

Composites:

Block:

Sect.:

Place:

App. Bear:

App. Dip.:

Length:

From	To	Discard:	Reason:
375	390	Hard shale - layers of hard sandstone.	
390	398	Shale.	
398	405	Very hard sandstone.	
405	412	Very hard sandstone.	
412	422	Shale.	
422	424.5	Carbonaceous shale (coaly).	
424.5	432.2	Coal - carbonaceous shale.	430 - 438.0 good coal
432.2	433.5	Shaley coal.	438 - 441.5 shale
433.5	435.5	Coal (carbonaceous shale).	441.5 - 449.0 sandstone
435.5	445	Shale.	449.0 - 462.0 shale
445	451.2	Interbedded shale and coal.	
451.2	452	Shaley coal.	462 - 480 Sandstone
452	456	Coal.	
456	457.5	Shale.	
457.5	462	Sandstone.	
462	480	Sandstone.	

Core Size

Hole No.

R.H. 151

Page

3

# Diamond Drill Geological Log



K-Feeding 70(3)A-2

BECKER DRILLING COMPANY

312

Objective:

Sampled:

Logged By: S.B. BUTRECHUK

Date: FEBRUARY, 1970

Composites:

Block:

Sect.:

Place: *Green hills*

App. Bear:

App.: Dip.:

Length:

From	To	Discard:	Reason:
0	10	Clay, gravel and sand.	
10	25	Clay, sand and gravel.	
25	34	Black shale.	
34	35	Coal.	#2082
35	65	Shale and sandstone.	
65	100	Sandy shale.	
100	102	Black shale.	
102	125	Coal.	<i>101-124° Actual #2083 - 2084</i>
125	170	Shale, sandstone layers.	
170	195	Coal	<i>170 - 194° Actual #2085 - 2088</i>
195	216	Shale.	<i>194 - 214°, s.s. &amp; shale</i>
216	220	Coal and shale.	<i>No shale</i>
220	230	Shale with coal stringers.	<i>214 - 220° Coal, good quality part "D"</i>
230	245	Shale.	
245	305	Shale and very hard sandstone.	
305	315	Sandstone with shale layers.	
315	321	Coal	<i>#2089 - 2090 313.5 - 321 Actual good quality "B"</i>
321	340	Hard sandstone.	
340	375	Very hard sandstone.	
375	405	Hard sandstone.	
405	475	Hard sandstone.	
		End of hole.	

*Revised by Radiation Log 24-28, poor coal, "F"*

*Seam "E" good coal*

*"D" good quality*

*214 - 220° Coal, good quality part "D"*

Core Size

4 1/4 - 3 7/8

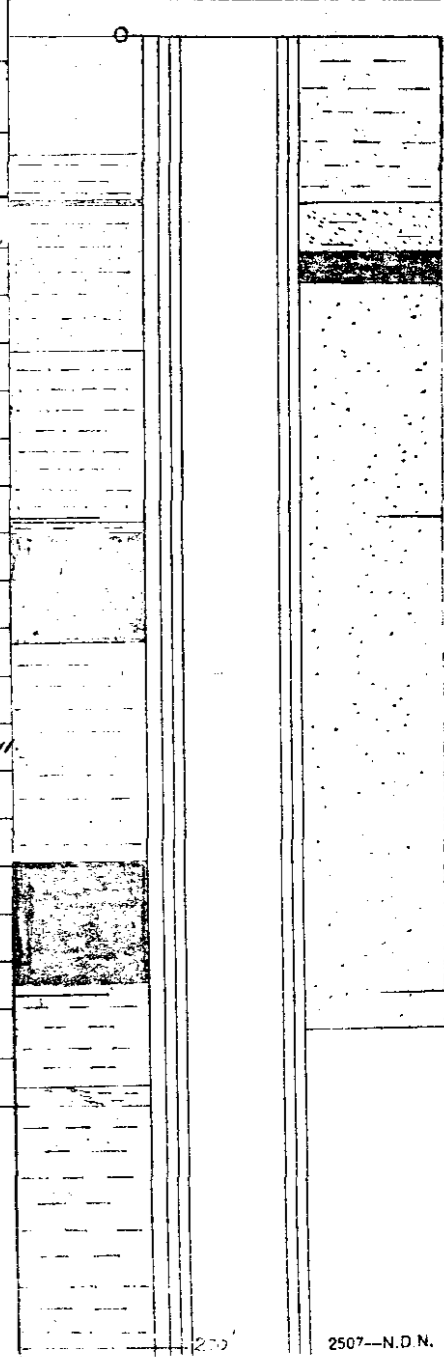
Hole No.

R.H. 152

Page

1

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



DIAMOND DRILL SAMPLING RECORD

GREENHILLS

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
34	35	"Minor" Raw Coal Composite				0.7	26.1	22.4	50.8	7½, 7, 7	0.80	
		Clean Coal Composite				0.4	10.9	23.9	64.8	7½, 7½, 7½	0.65	
102	125	"B" Raw Coal Composite				0.9	31.5	19.5	48.1	3½, 4, 3½	0.27	
		Clean Coal Composite				0.44	12.1	22.5	65.0	4½, 4½, 4	0.35	
170	195	"D" Raw Coal Composite				0.7	29.6	18.6	51.1	2½, 2, 2½	0.44	
		Clean Coal Composite				0.6	10.9	21.4	67.0	2½, 3, 3	0.34	
315	321	"B" Raw Coal Composite				0.7	9.1	21.8	68.4	5½, 5½, 5	0.44	
		Clean Coal Composite				0.2	6.7	22.0	71.0	4½, 4½, 4½	0.30	



# Diamond Drill Geological Log



K - FORDING 36(3)A-3

BECKERS DRILLING COMPANY

Objective:

Sampled:

**312**

Logged By: S.B. BUTRENUCHUK

Date: MARCH, 1970

Composites:

Block:

Sect.:

Place:

GREENHILLS

App. Bear:

App. Dip:

Length:

From To Discard: Reason:

*REVISED by Radiation log*

0	20	Clay and gravel.		
20	25	Clay and gravel.		
25	30	Clay and gravel.		
30	34	Very hard sandstone.		
34	55	Sandstone with shale layers.		
55	103	Coal	(2146 to 2150 and 5001 to 5005)	56 - 103.5 Excellent Coal
103	105	Shale.		All "B" 103.5 - 105.5 Shale
105	107	Coal.	(5006)	105.5 - 108.0 Poor coal
107	115	Shale.		
115	155	Sandstone with shale layers.		
155	164	Shale and sandstone.		
164	170	Coal.	(5007)	163 - 169.5 actual, fair coal A-2
170	215	Shale and sandstone.		187.5 - 190.5 " " " A-1
215	290	Hard sandstone - shale layers.		
290	330	Hard sandstone.		
	330	End of hole.		

270'

Core Size

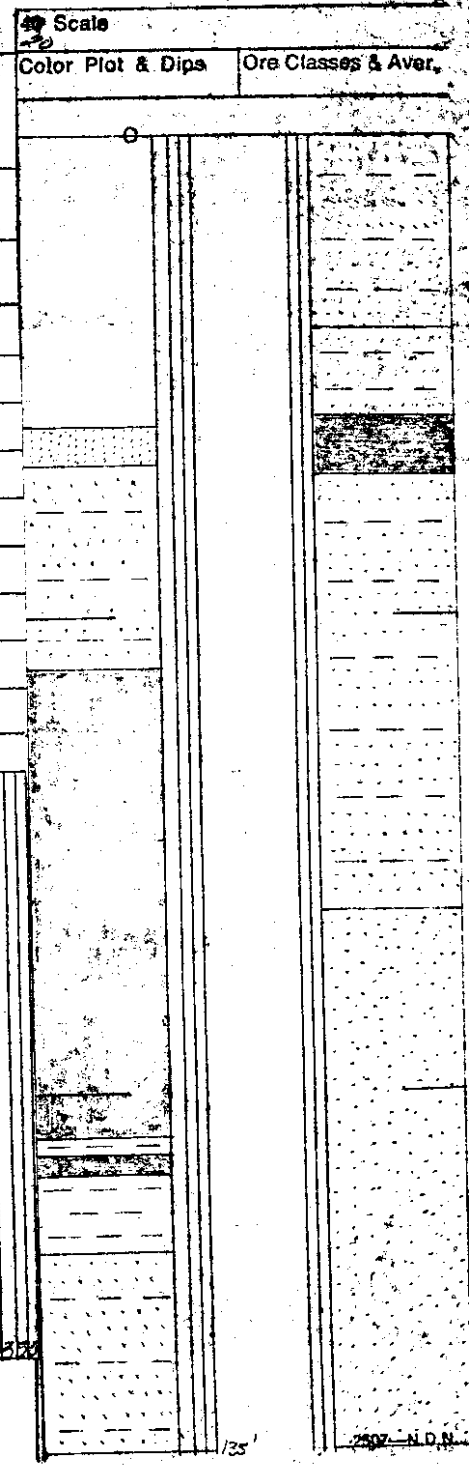
3 7/8"

Hole No.

RH 153

Page

1



DIAMOND DRILL SAMPLING RECORD

GREENHILLS

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
55	103	"B" Raw Coal Composite				0.8	14.3	19.7	65.2	4½, 4½, 4½	0.63	
105	107	Clean Coal Composite				0.24	6.6	21.6	71.6	5, 5½, 5	0.28	
164	170	"Minor" Raw Coal Composite				0.5	18.1	20.1	61.4	6½, 7, 7	0.69	
		Clean Coal Composite				0.4	11.8	22.0	65.8	7½, 7½, 7½	1.1	

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
105	142	"D" (Shale actually 129-132, 136.5-142)										
		Raw Coal Composite				0.6	29.4	18.6	51.4	2½,3	0.25	
		Clean Coal Composite				0.6	10.5	21.1	67.9	3½,3½	0.52	
225	243	"B" Raw Coal Composite				0.4	16.5	21.1	62.0	4½,5	0.96	
		Clean Coal Composite				0.54	8.6	23.0	67.8	5½,6	0.29	
323	328	"Minor" Raw Coal Composite				0.4	39.0	17.3	43.3	4,4	0.55	
		Clean Coal Composite				0.9	14.0	20.8	64.3	5,5	0.33	

# Diamond Drill Geological Log



K-FAROEING 70(3)A-2

BECKER'S DRILLING COMPANY

Objective:

Sampled:

312

40 Scale

Color Plot & Dips

Ore Classes & Aver.

Logged By: S.B. BUTRENCHUK

Date: FEBRUARY, 1970

Composites:

Block:

Sect.:

Place:

App. Bear:

App. Dip.:

Length:

GREENHILLS

From To Discard Reason:

*Revised by radiation log*

0	10	Gravel with clay layers.	
10	25	Gravel - water gravel at 20 feet.	
25	40	Clay and gravel.	
40	45	Shale.	
45	100	Shale.	
100	115	Hard sandstone.	
115	175	Sandstone - shale layers.	
175	180	Shale and sandstone.	
180	185	Shale and sandstone.	
185	210	Coal with shale stringers.	(2119 - 2121) <i>187.5 - 220.0 Coal good qual seam E</i>
210	270	Shale and sandstone - stringers of coal.	
270	284	Hard shale, sandstone layers.	
284	306	Coal. (301 feet to 323 feet).	[
306	317	Shale with coal stringers	[
317	332	Coal. (334 feet to 351 feet).	(2122 to 2128) <i>"D" upper 303-337 Coal good</i>
332	334	Coal.	[
334	350	Hard sandstone.	
350	365	Hard sandstone.	<i>lower "D" 359-362 Coal fair</i>
365	375	Shale with coal stringers.	
375	407	Hard sandstone - layers of shale and coal.	
407	413	Coal. (424 feet to 430 feet).	(2128 - 2129) <i>Fair quality seam C</i>
413	430	Shale and sandstone.	
430	433	Shattered sandstone.	

Core Size

3 7/8"

Hole No.

RH 155

Page

1

135'

2507-N.D.N. 270

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
185	210	"E" Raw Coal Composite				0.8	28.6	20.2	50.4	5 $\frac{1}{2}$ .5	0.52	
		Clean Coal Composite				0.33	10.6	24.0	65.1	8,7 $\frac{1}{2}$	0.37	
320	341	"D" Raw Coal Composite				0.6	23.2	20.3	55.9	4,4	0.55	
		Clean Coal Composite				0.4	11.2	22.4	65.9	5,5	0.35	
349	352	"D" Lower										
		Raw Coal Composite				1.0	14.4	19.7	64.9	2 $\frac{1}{2}$ ,2 $\frac{1}{2}$	0.66	
		Clean Coal Composite				0.4	5.9	21.6	72.1	3,2 $\frac{1}{2}$	0.65	
424	430	"C" Raw Coal Composite				0.5	33.1	17.7	48.7	1,1	0.47	
		Clean Coal Composite				0.5	10.5	20.5	68.5	2,1 $\frac{1}{2}$	0.37	

# Diamond Drill Geological Log



K- FORDING 70(3)A-2

Becker Drilling Co.

20  Soft

Objective:

Sampled:

312

Color Plot & Dips

Ore Classes & Avgr.

Logged By: S.B. Butrenchuk

Date: April, 1970

Composites:

Block:

Sect.:

Place:

Greenhills

App. Bear:

App. Dip:

Length:

From	To	Discard:	Reason:
0	18	Clay and Water Gravel	
18	47	Overburden	
47	60	Shale and Sandstone	
60	63	Coal	
63	80	Hard sandstone - shale layers	
80	99	Shale	
99	120	Coal	3 E
120	185	Shale and sandstone stringers	
185	230	Hard sandstone - coal stringers	
230	265	Hard sandstone	
265	295	Very hard sandstone - coal stringers	
295	325	Hard sandstone	
325	330	Very hard sandstone	
330	364	Shale and sandstone layers	
364	373	Coal	2 E
373	410	Shale	
410	432	Shale and sandstone	
432	454	Shale and sandstone - coal stringers	
454	490	Coal	3 D
490	505	Shale and sandstone - coal stringers	
		505' End of hole	

Core Size

3-7/8"

Hole No. R.H. 156

Page 1

1/35'

270'

DIAMOND DRILL SAMPLING RECORD

GREENHILLS

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
60	63	"Minor" Raw Coal Composite				0.4	22.7	23.4	53.5	6,6,6½	0.82	
		Clean Coal Composite				0.7	8.5	27.5	63.4	8,7½,7½	0.97	
364	373	"B" Raw Coal Composite				0.4	58.8	15.0	25.8	1,1,1	0.16	
		Clean Coal Composite				0.6	13.8	22.0	63.6	3½,3,3½	0.43	
99	120	"F" Raw Coal Composite				0.6	36.7	18.3	44.0	1½,1½,1½	0.16	
		Clean Coal Composite				0.66	9.4	23.5	66.5	3½,3½,3	0.39	
454	490	"D" Raw Coal Composite				0.4	21.5	19.2	58.9	2½,2½,2	0.44	
		Clean Coal Composite				0.6	9.3	21.0	69.2	2½,3,2½	0.36	

# Diamond Drill Geological Log



K-FROING 70(3)A-2

Becker Drilling Co.

Objective:

Sampled:

Logged By: S.B. Butrenchuk

Date: April, 1970

Composites:

312

20' Scale  
Color Plot & Dip  
Ore Classes & Aver.

Block: Sect.: Place: **Greenhills** App. Bear: App. Dip: Length:

From	To	Discard:	Reason:
0	27	Gravel, boulders and clay	
27	60	Shale layers - shattered shale	
60	70	Broken formations.	

Abandoned at 70', because of caving ground.

Hole No.	1-157	Elev.	1150
Lat.		Dep.	
		Elev.	Th.
Top of		@	
Top of		@	
Top of		@	
Top of		@	

Core Size 3-7/8"

Hole No. R.H. 157 Page 1

70'



# Diamond Drill Geological Log



Becker Drilling Co.

Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

Logged By: W. E. Pearson Date: \_\_\_\_\_ Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: Green hills App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From	To	Discard:	Reason:
0	40	Overburden	Revised Gamma Ray Log
40	57	Clay rocks Gravel	
57	68	Shale Sandstone Coal Stringers	
68	74	Coal	5151 71 → 77 Part E
74	79	Shale	77' → 81' Shale parting
79	104	Coal	5152 - 5156 Good Coal 81 - 104 Seam E
104	110	Shale	
110	143	Coal	5157 - 5163 Good Coal 111 - 147 Seam D
143	150	Shale Coal Stringers	
150	250	Sandstone	
End Hole			

Hole No. _____	Elev. _____
Lat. _____	Dep. _____
	Elev. Th.
Top of <u>F</u> @ <u>5386.5</u>	<u>23.0'</u>
Top of <u>D</u> @ <u>5366.5</u>	<u>3.0'</u>
Top of _____ @ _____	'
Top of _____ @ _____	'

Core Size

Hole No.

RH 157 A

Page

1

250'

DIAMOND DRILL SAMPLING RECORD

GREENHILLS

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
68	74	"E" Raw Coal Composite				0.6	28.8	19.1	51.5	3.2 $\frac{1}{2}$ .2 $\frac{1}{2}$	0.30	
79	105	Clean Coal Composite				0.7	9.8	22.3	67.2	6 $\frac{1}{2}$ .6.6	0.35	
110	143	"D" Raw Coal Composite				0.6	14.4	20.7	64.3	5.5 $\frac{1}{2}$ .5	0.27	
		Clean Coal Composite				0.6	8.7	21.5	69.1	5.5.5 $\frac{1}{2}$	0.28	

# Diamond Drill Geological Log

Becker Drilling Co.



K-FORING 70131A-2

20 Scale

Objective:

Sampled:

312

Logged By: S.B. Butrenchuk Date: April, 1970

Composites:

Block: Sect: Place: Greenhills App. Bear: App. Dip.: Length:

From To Discard: Reason:

0	17	Clay, rocks and gravel
17	30	Shattered Shale and Sandstone
30	70	Clay and Shattered Rock
70	75	Shale
75	115	Clay - carbonaceous
115	165	Sandstone
165	175	Very hard sandstone

Hole No. R.H. 158 Elev. 3152.1  
 Lat. 40° 29.1' Dep. 73° 03.6'  
 Elev.          Th.           
 Top of          @           
 Top of          @           
 Top of          @           
 Top of          @         

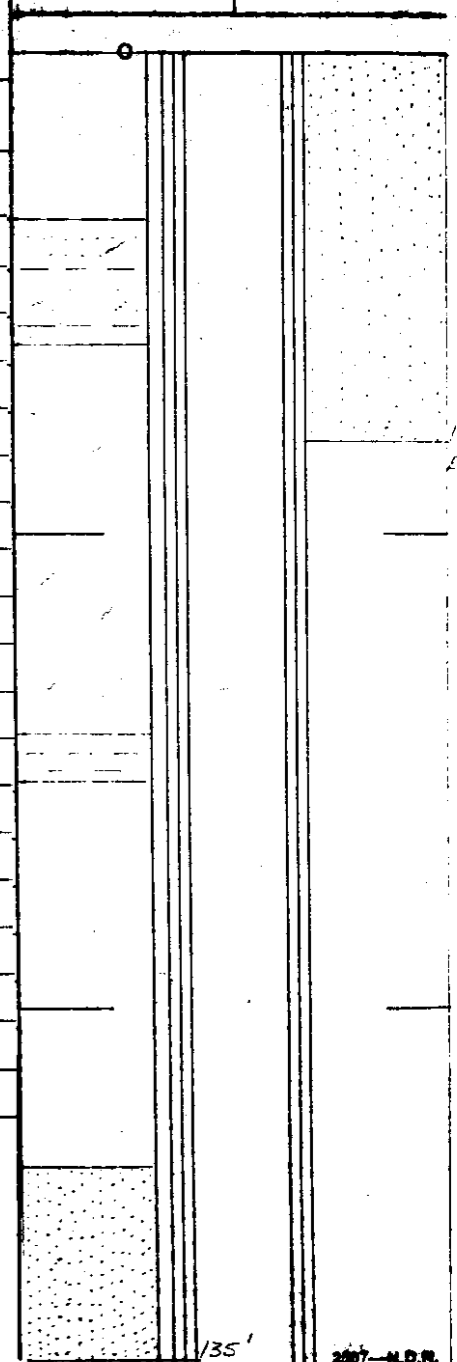
175' End of Hole

Core Size 3-7/8"

Hole No. R.H. 158

Page 1

Color Plot & Dips Ore Classes & Aver.



135'

# Diamond Drill Geological Log



K- FORDING 70LS/A-2

BECKER DRILLING COMPANY

Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

Logged By: **S.B. BUTRENCHUK** Date: **APRIL, 1970** Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: **Greenhills** App. Bear: \_\_\_\_\_ App.: Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

**312**

From	To	Discard:	Reason:
------	----	----------	---------

0	30	Clay and Gravel.	
30	40	Clay and shattered rock.	
40	58	Clay, rocks and gravel.	
58	165	Shale and sandstone.	
165	265	Shale.	
265	275	Hard sandstone.	
		End of hole.	

Core Size  
**3 7/8"**

Hole No. **R.H. 159** Page **1**

40 Scale

Color Plot & Dips

Ore Classes & Aver.

# Diamond Drill Geological Log



K-FACONG 70(3)A-2

Becker Drilling Co.

20 Feet

Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

**312**

Logged By: **S.B. Butrenchuk** Date: **March, 1970** Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: **Greenhills** App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

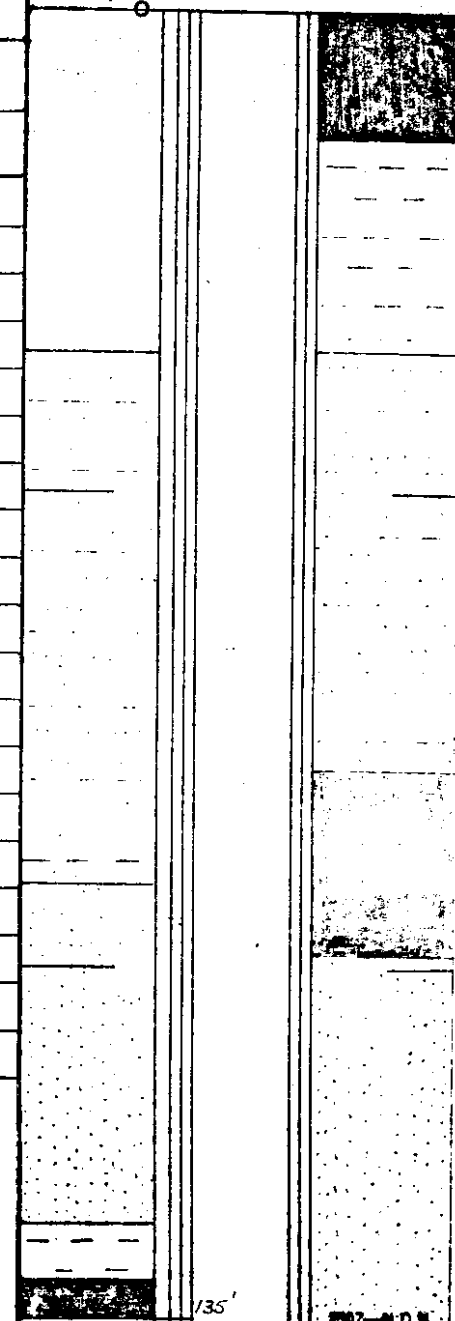
From	To	Discard:	Reason:
0	10	Overburden	
10	35	Clay, gravel and boulders	
35	90	Shale and sandstone	
90	125	Hard sandstone	
125	130	Shale with coal stringers	
130	131	Shale	
131	135	Dirty Coal	<i>Coal good quality</i>
135	148	Coal	<i>Seam E</i>
148	170	Shale with coal stringers	
170	190	Hard Shale and Sandstone	
190	213	Shale and sandstone	
213	232	Coal	<i>215-232.0 Actual good quality Seam "D"</i>
232	255	Sandstone - stringers of shale and coal	
255	275	Hard sandstone	

Hole No. 11160 Elev. 5190.3  
 Lat. 490, 29.4 Dep. 72, 384.7  
 Elev. Th.  
 Top of E @ 5360.3 | 18.0'  
 Top of D @ 5275.3 | 17.0'  
 Top of \_\_\_\_\_ @ \_\_\_\_\_ | \_\_\_\_\_'  
 Top of \_\_\_\_\_ @ \_\_\_\_\_ | \_\_\_\_\_'

Core Size **4 1/2"**

Hole No. **RH 160**

Page 1



135'

DIAMOND DRILL SAMPLING RECORD

GREENHILLS

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
131	148	"E" Raw Coal Composite				0.6	18.9	21.9	58.6	6.5.5	0.38	
		Clean Coal Composite				0.7	11.0	22.6	65.8	4½,4½	0.52	
213	232	"D" Raw Coal Composite				0.6	16.2	20.6	62.6	2.2.2	0.33	
		Clean Coal Composite				0.7	9.2	21.7	68.4	3½,4,3½	0.33	

# Diamond Drill Geological Log



K-FACING 7-631A-2

BECKER DRILLING

Objective:

Sampled:

312

Logged By: W.E. PEARSON

Date: July 22, 1970

Composites:

Block:

Sect.:

Place:

Greenhills

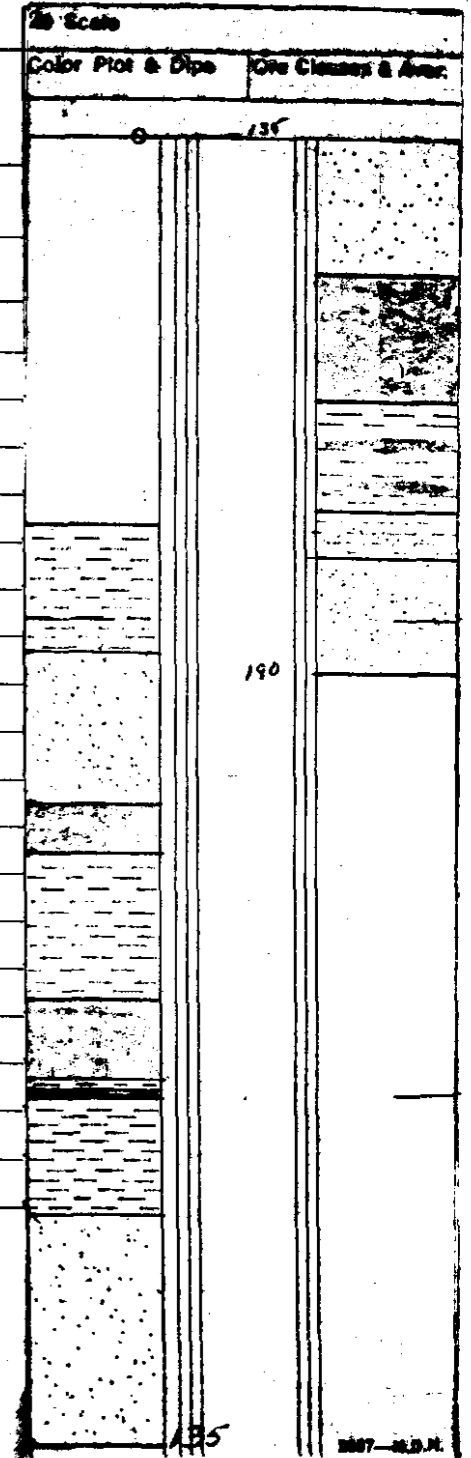
App. Bear:

App. Dip.:

Length:

From To Discard: Reason:

			<i>Revised by radiation log</i>	
0	40	Overburden		
40	53	Shale.		
53	69	Sandstone.		
69	74	Coal.	70.0 - 74.0	
74	89	Shale		
89	97	Coal.	88.0 - 95.0	
97	98	Shale.		
98	99	Coal.		
99	111	Shale.		
111	149	Sandstone		
149	162.5	Coal.	144.0 - 146.0	149.0 - 162.5
162.5	173	Shaley Coal.		
173	178	Sandy Shale.		
178	190	Sandstone.		
190	205	Sandstone.		
205	209.5	Sandstone, traces coal.		
209.5	210	Coal.		
210	230	Sandstone, traces coal.		
230	252	Sandstone.		
252	254	Shale.		
254	256	Coal.		
256	261	Shale, coal stringers.		
261	265	Shale.		



Core Size

3 7/8"

Hole No. R.H. 161

Page 1

# Diamond Drill Geological Log



Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

Logged By: **W.E. PEARSON** Date: **July 29, 1970** Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: **Greenhills** App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From	To	Discard:	Reason:
------	----	----------	---------

265	268	Shale and coal.	
-----	-----	-----------------	--

268	270	Shale.	
-----	-----	--------	--

270	277	Shale, coal traces.	
-----	-----	---------------------	--

277	300	Sandstone.	
-----	-----	------------	--

End of hole - July 30th, 1970

Core Size

3 7/8"

Hole No.

R.H. 161

Page

2

Scale  
20

Color Plot & Dips Ore Classes & Aver.

199



FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
69.0	74.0	UPPER D RAW COAL					0.6	33.9	17.2	48.3	$\frac{2}{2}, \frac{3\frac{1}{2}}{2}, \frac{3\frac{1}{2}}{2}$	.49	
		CLEAN COAL					0.2	7.5	22.1	70.2	$\frac{7}{7}, \frac{7}{7}, \frac{7}{7}$	.41	Recovery 49.6%
89.0	97.0	LOWER D RAW COAL					0.6	37.2	16.3	45.9	1.1.1	.52	
		CLEAN COAL					0.5	11.8	20.3	67.4	$\frac{5}{2}, \frac{5\frac{1}{2}}{2}, 5$	.54	Recovery 48%

FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
149	162	Seam "B"					0.5	17.2	19.8	62.5	5 $\frac{1}{2}$ , 5 $\frac{1}{2}$ , 5	0.36	
							0.5	7.6	21.6	70.3	5 $\frac{1}{2}$ , 5, 5	0.41	89.8 % Recovery

# Diamond Drill Geological Log



K-FOROSIN 70(3)A-2

## Becker Daily Drill Report

Objective:

Sampled: **312**

Logged By: J.D.D.

Date: Sept. 13, 1970

Composites:

Block:

Sect.:

Place: *Green hills*

App. Bear:

App.: Dip.:

Length:

From To Discard: Reason: *Revised by radiation log*

0	26	Overburden	
26	30	Sandstone	
30	36	Sandy shale	
36	52	Shale	
52	78	Coal + Shale mix	56' - 78' 4399,4400, 4295- 4300, 506 46.0 - 88.0
78	80	Shale	
80	88	Coal (trace of shale)	
88	89	black shale	
89	91	Sandy shale	
91	92	Coal stringer	
92	97	Brown shale	
97	101	Sandy shale	
101	102	Brown shale	100.0 - 108.0
102	110	Coal + shale mix	
110	113	Brown shale	
113	114	Coal stringer	
114	116	Brown shale	
124	144	Sandstone (131 - 134 shattered sandstone)	
144	154	Sandy shale	<del>144 - 154</del> 150.0 - 158.0
156	158	Brown shale	
158	162	Coal + shale mix	
162	285	Soft sandstone, shattered & with clay gouge	
		End of hole	

Core Size

Hole No.

R.H. 162

Page

1

40 Scale

Color Plot & Dips

Ore Classes & Aver.

# Diamond Drill Geological Log



K-FOROSING 70131A-2

Becker Drilling

Scale  
30

Objective:

Sampled:

**312**

Color Plot & Dips

Ore Classes & Aver.

Logged By: WE Pearson

Date: July 26/70

Composites:

Block:

Sect:

Place:

Green hills

App. Bear:

App.: Dip:

Length:

From To Discard:

Reason:

Revised by Radiation log

From	To	Discard:	Reason:
0	21	Overburden	
21	35	Sandstone	
35	50	Sandy shale	
50	68	Coal	51.0 - 70.0 4814, 4815, 4816, 4817
68	69	Shale	
69	70	Coal	4817
70	130	Sandy shale sandstone layers	

End hole July 27/70

Core Size

3 7/8

Hole No.

RH 163

Page

1

130

# Diamond Drill Geological Log



K- FORDING 70/31A-2

Becker Drilling

Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_ **312**

Logged By: WE Pearson Date: July 27/70 Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: Green Hills App. Bear: \_\_\_\_\_ App.: Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From To Discard: Reason: *Revised by Radiation log*

From	To	Discard:	Reason:
0	56	Overburden	
56	60	Sandstone	
60	123	Sandstone	shale stringers, traces of coal
123	125	Coal	125.0 - 127.0
125	140	Shale	
140	200	Sandstone	

End hole July 29/70

Core Size

4 1/2"

Hole No.

RH 164

Page

1

Scale: \_\_\_\_\_

Color Plot & Dip: \_\_\_\_\_ Ore Classes & Avgr: \_\_\_\_\_

125  
135

# Diamond Drill Geological Log



K- FRODING 70(3)A

Objective:

Sampled:

Logged By: \_\_\_\_\_ Date: \_\_\_\_\_

Composites:

312

Block:

Sect.:

Place: Green Hills

App. Bear:

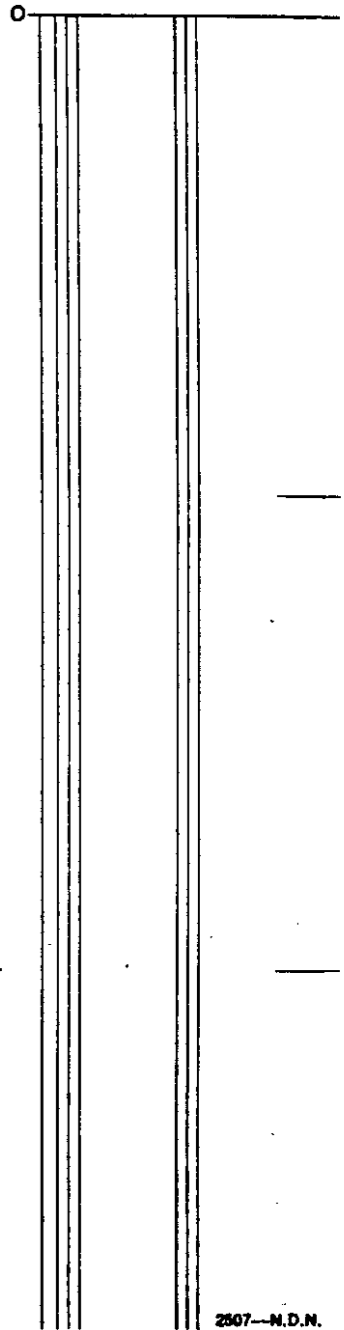
App.: Dip.:

Length:

From To Discard Reason:

0	44	Overburden - cased	
44	66	Coal (drillers were 3' into coal before taking sample)	
66	70	Black Shale	
70	71	Coal partings	
71	73	Black shale	
73	75	Coal and shale	
75	78	Black shale	
78	80	Brown to gray shale	
80	83	Sandy shale	
83	85	Sandstone	

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



Core Size

Hole No. RH 165 Page 1

# Diamond Drill Geological Log



K-FORGING 70(3)A-2

## BECKER DRILL LOG

Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

Logged By: \_\_\_\_\_ Date: **September 9/70** Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: **GREENHILLS** App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

**312**

From	To	Discard:	Reason:
0	10	Overburden	
10	13	Sandstone	
13	14	Sandyshale	
14	16	Sandstone	
16	17	Sandyshale	
17	24	Sandstone	
24	26	Sandyshale	
26	35	Sandstone	
35	36	Sandyshale	
36	49	Sandyshale	
49	50	Sandyshale	
50	56	Sandstone	
56	65	Sandstone	
65	70	Sandyshale	
70	78	Shale	
78	86	Coal	
86	109	Coal	
109	110	Coal and shale mix	
110	111	Black shale	
111	115	Sandy shale	
115	116	Black shale	
116	125	Sandy shale	

40 Scale

Color Plot & Dips

Ore Classes & Aver.

0

Hole No. **R. H. 166** Page \_\_\_\_\_

# Diamond Drill Geological Log

BECKER DRILL LOG



K-FACING 70131A-2

Objective:

Sampled: **312**

Logged By:

Date: August 27/70

Composites:

Block:

Sect.:

Place: GREENHILLS

App. Bear:

App. Dip.:

Length:

From	To	Discard:	Reason:
0	32	Overburden	
32	36	Shale	
36	43	Shale coal stringers	
43	48	Sandy shale	
48	49	Coal	
49	54	Sandstone fractured	
54	60	Sandy shale	
60	65	Sandstone	
65	72	Sandy shale	
72	77	Shale	
77	84	Sandstone fractured	
84	92	Sandy shale	
92	93	Sandy shale	
93	112	Sandstone	
112	113	Shale	
113	147	Coal 146' to 147' coal and shale	
147	160	Sandy shale	
160	171	Sandstone	

171' END OF HOLE AUGUST 29/70

Core Size 3 7/8"

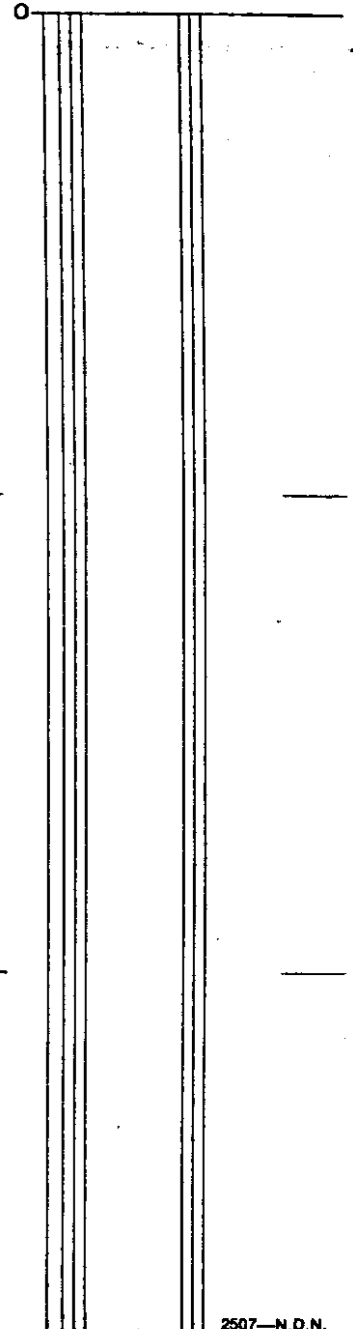
Hole No. RH.167

Page 1

40 Scale

Color Plot & Dips

Ore Classes & Aver.





FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
113	147	Seam "B" RAW COAL					0.5	18.4	19.4	61.7	2,2,2½	.30	
		CLEAN COAL					1.2	11.6	20.3	66.9	2½,2½,3	.33	85.1 % Recovery

# Diamond Drill Geological Log

BECKER DRILL LOG



K-FACING 70(3)A-2

Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_  
 Logged By: \_\_\_\_\_ Date: August 31/70 Composites: \_\_\_\_\_

3/2

Block: \_\_\_\_\_ Sect: \_\_\_\_\_ Place: GREENHILLS App. Bear: \_\_\_\_\_ App. Dip: \_\_\_\_\_ Length: \_\_\_\_\_

From	To	Discard:	Reason:
0	34	Overburden	
34	38	Coal	
38	77	Shale	
77	84	Sandstone	
84	91	Sandstone fractured	
91	92	Sandstone (hard)	
92	139	Sandstone	
139	143	Shale traces coal	
143	206	Coal	141.0 - 152.5
206	208	Shale	
		208' END OF HOLE	AUGUST 31/70

40 Scale

Color Plot & Dips

Ore Classes & Aver.

0

Core Size 3 7/8"

Hole No. RH. 168

Page 1

FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
141	203	Seam "B" RAW COAL					0.5	16.5	ND	ND	3,3,2½	ND	
		CLEAN COAL					1.3	10.4	20.4	67.9	4,4,4	0.55	89.0 % Recovery

# Diamond Drill Geological Log



K - FARGOENG 70(3)A-2

BECKER DRILLING

Objective:

Sampled: **312**

40 Scale

Color Plot & I

Logged By: **W.E. PEARSON**

Date: **July 31, 1970**

Composites:

Block:

Sect.:

Place: **GREENHILLS**

App. Bear:

App.: Dip.:

Length:

From	To	Discard:	Reason:
0	16	Overburden.	
16	32	Shale.	
32	35	Sandstone.	
35	47	Shale.	
47	64	Sandstone.	
64	90	Shale.	
90	105	Sandstone.	
105	129	Coal, shale stringers - 4833 to 36.	108.0 - 130.0
129	138	Shale, coal stringers.	
138	175	Sandstone, coal stringer at 151' and 171'.	
175	184	Shale and sandstone.	
184	209	Shale.	
209	233	Coal. 4837 to 46.	210.0 - 234.0
233	235	Shale.	
235	241	Coal.	237.0 - 240.0
241	257	Shale.	
257	263	Coal 4847 to 4850.	258.0 - 264.0
263	269	Shale.	
269	272	Sandstone.	
272	276	Sandshale and coal.	
276	353	Sandstone. Coal stringer at 265 and 294	
353	356	Shale.	
356	362	Sandstone.	

*Revised by radiation log*

Core Size

3 7/8

Hole No.

RH 169

Page

1

# Diamond Drill Geological Log



BECKER DRILLING

Objective:

Sampled:

Logged By: **W.E. PEARSON**

Date: **July 31, 1970**

Composites:

Block:

Sect.:

Place: **Greenhills**

App. Bear:

App. Dip.:

Length:

From	To	Discard:	Reason:
------	----	----------	---------

362	373	Coal.	4851 to 4853.
-----	-----	-------	---------------

373	375	Shale.	
-----	-----	--------	--

375	380	Sandstone.	
-----	-----	------------	--

	380	End of hole August 2nd, 1970.	
--	-----	-------------------------------	--

Core Size

3 7/8

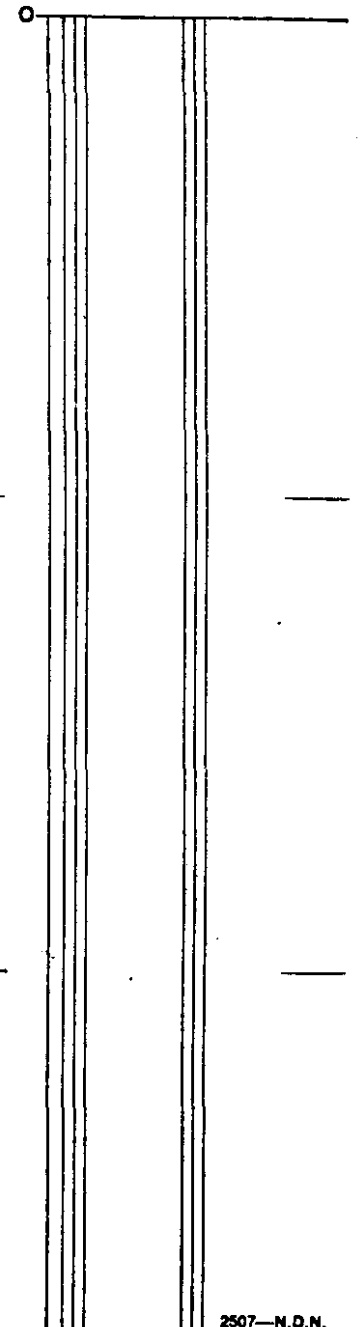
Hole No.

RH 169

Page

2

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
105.0	109.0	Seam "E" RAW COAL					0.6	34.3	18.8	46.3	4,4,4 $\frac{1}{2}$	0.33	
115.0	129.0	CLEAN COAL					0.4	11.7	22.7	65.2	7,7 $\frac{1}{2}$ ,7 $\frac{1}{2}$	0.33	62.6 % Recovery
209.0	241.0	Seam "D" RAW COAL					0.6	21.0	20.5	57.9	5 $\frac{1}{2}$ ,5,5	0.33	
257.0	263.0	CLEAN COAL					0.5	10.1	21.3	68.1	4 $\frac{1}{2}$ ,5,5	0.41	79.2 % Recovery
362.0	373.0	Seam "B" RAW COAL					0.7	24.4	18.7	56.2	5 $\frac{1}{2}$ ,3,3 $\frac{1}{2}$	0.30	
		CLEAN COAL					0.9	8.5	20.7	70.4	4,4 $\frac{1}{2}$ ,4 $\frac{1}{2}$	0.33	66.1 % Recovery

# Diamond Drill Geological Log



K-FAROSING 70(3)A-2

Becker Drilling

Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

Logged By: W.E. Pearson Date: July 14/70 Composites: \_\_\_\_\_

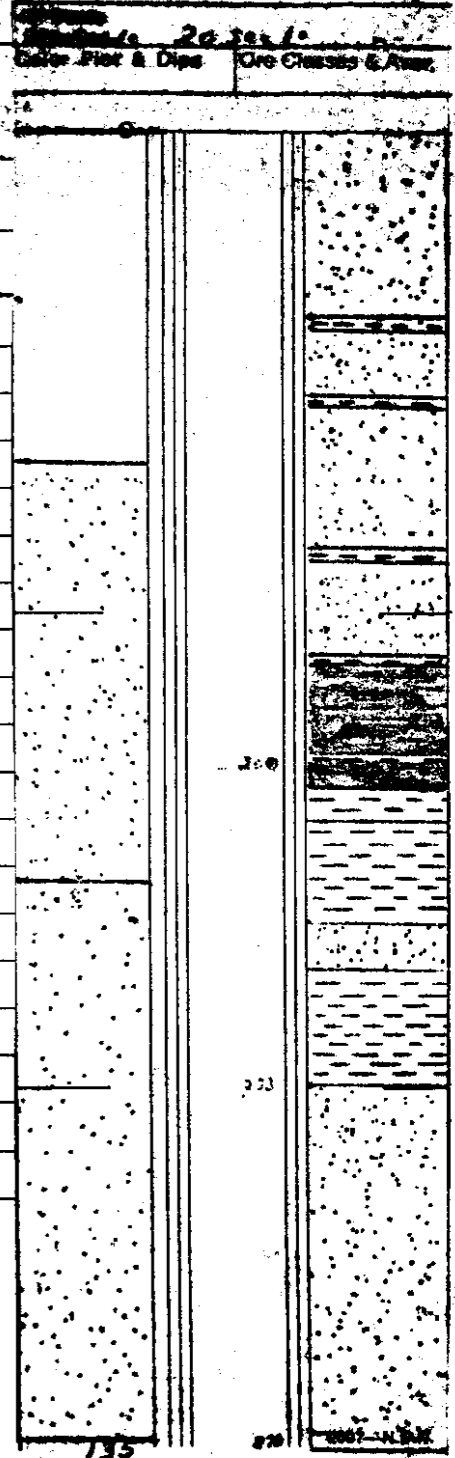
312

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: Green Hill App. Bear: \_\_\_\_\_ App.: Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From	To	Discard:	Reason:
0	34	Overburden	
34	154	Sandstone	trace of coal 51.0' to 52.0' <i>Revised by radiation log</i>
154	155	Shale	
155	162	Sandstone	
162	163	Shale	
163	178	Sandstone	
178	179	Shale	
179	189	Sandstone	
189	190	Shale	
190	199	Coal	4801 4802 Coal 191.0 - 200.0
199	200	Shale	
200	202	Coal	4803
202	216	Shale	
216	221	Sandstone	
221	233	Shale	
233	304	Sandstone (hard)	
304	309	Coal	4804 306.0 - 310.0
309	323	Sandstone	
323	325	Coal	4805
325	335	Sandstone	
335	340	Shale	
340	341	Coal	
341	343	Shale	

Core Size  
3 7/8

Hole No. RH 172 Page 1



# Diamond Drill Geological Log



Becker Drilling

Objective:

Sampled:

Logged By: **W.E. Pearson**

Date:

Composites:

Block:

Sect.:

Place:

App. Bear:

App. Dip.:

Length:

From To Discard Reason:

343	348	Sandstone	
348	371	Blackshale	coal traces
371	385	Sandstone	hard

End of hole July 22/70

40 Scale

Color Plot & Dip Ore Classes & Aver.

270

305

305

Core Size

3 7/8

Hole No.

RH 172

Page

2



FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
190.0	199.0	Seam "E" RAW COAL					0.1	54.6	15.4	29.9	1,1,1	0.69	
200.0	202.0	CLEAN COAL					0.4	10.8	21.6	67.2	8,8,7½	0.50	45.2 % Recovery
304.0	310.0	Seam "D" RAW COAL					0.6	25.2	19.4	54.8	6½,6,6½	0.49	
323.0	325.0	CLEAN COAL					0.3	16.7	21.6	61.4	7½, 7½, 7½	0.54	68.4 % Recovery

# Diamond Drill Geological Log



K-FAROSINE 70(3)A-2

## BECKER DAILY DRILL REPORT

Objective:

Sampled:

312

Logged By: Date: September 29, 1970

Composites:

Block: Sect.:

Place: Green Hills

App. Bear:

App. Dip:

Length:

From To ~~Contract~~ Reason:  
Started September 21, 1970

Revised by Radiation Log

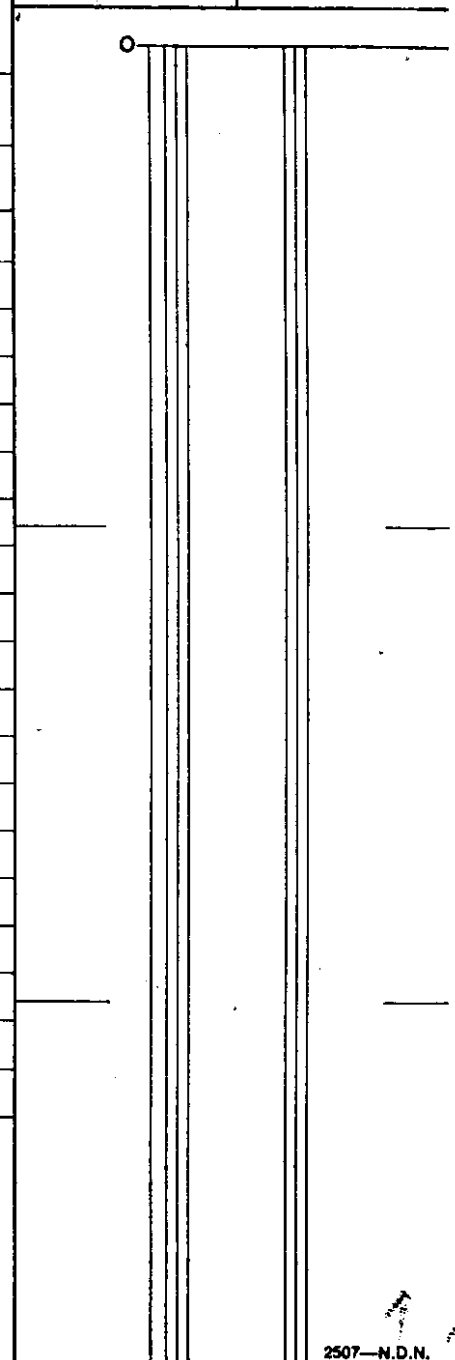
0	30	Overburden	
30	45	SHALE	
45	51	Coal	28.0 - 50.0
51	52	Shale	
52	61	Coal	
61	63	Shale, Coal	
63	80	Shale	
80	94	Shale	
94	101	Sandstone	
101	105	Shale	
105	110	Sandstone & Shale layers	
110	121	Shale	
121	124	Sandstone	
124	151	Shale	
151	180	Coal	153.0 - 180.0
180	192	Shale	
192	211	Sandstone	
211	221	Sandy Shale	
221	226	Shale	
226	229	Sandy Shale	
229	235	Coal	229.0 - 235.5
235	241	Shale	
241	285	Sandstone	

Core Size 3 7/8

Hole No. RH 175

Page 1 of 2

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



# Diamond Drill Geological Log



BECKER DAILY DRILL REPORT

Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

Logged By: \_\_\_\_\_ Date: September 29, 1970 Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App.: Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From To Discard: Reason:

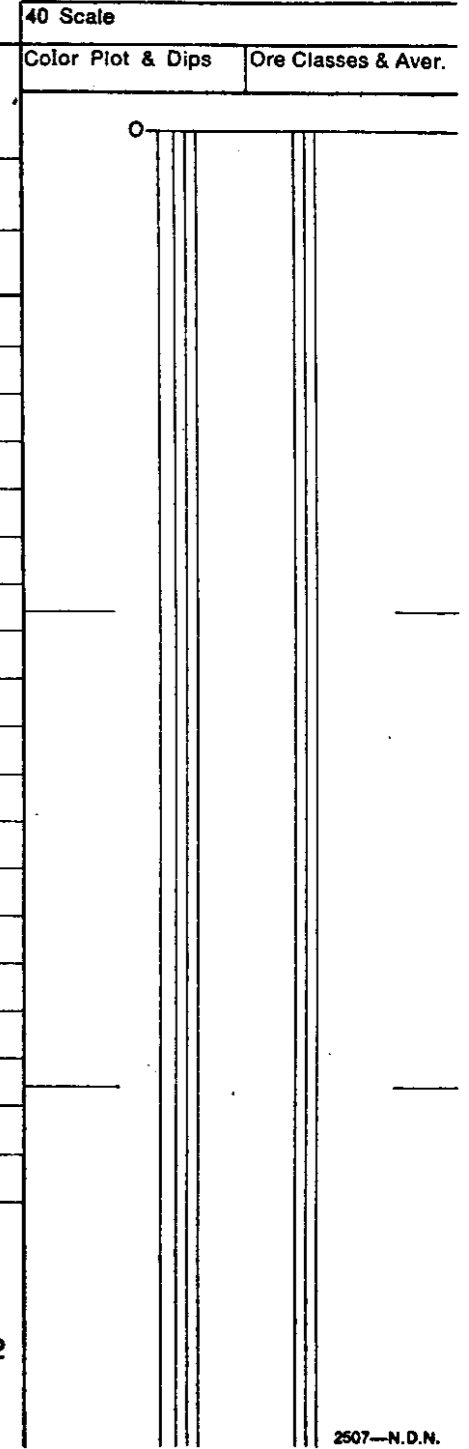
From	To	Discard:	Reason:
285	315	Sandstone	
315	344	Sandstone	
344	359	Sandstone	
359	363	Shale	
363	364	Coal Stringer	
364	369	Shale	
369	374	Sandstone	
374	377	Coal Shale	
377	382		
382	391	Shale	
391	395	Sandstone	

Hole Completed September 25, 1970

Core Size 3 7/8

Hole No. RH 175

Page 2 of 2



FORDING OPERATIONS  
DIAMOND DRILL SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
48.0	63.0	E RAW COAL				0.3	45.3	16.6	37.8	2½, 2½, 2½	.38	
		CLEAN COAL				1.0	16.6	21.2	61.2	8, 8, 7½	.51	Recovery 51.4%
151.0	180.0	UPPER D RAW COAL				0.1	22.1	19.6	58.2	1, 1, 1	.41	
		CLEAN COAL				0.7	10.7	19.8	68.8	2, 2, 2½	.53	Recovery 79.8%
229.0	235.0	LOWER D RAW COAL				0.4	25.4	18.5	55.7	1½, 1½, 1½	.47	
		CLEAN COAL				0.8	14.5	19.4	65.3	3, 3, 3	0.54	Recovery 77.2%

# Diamond Drill Geological Log



K-FAROEING 70(3)A-2

## BECKER DAILY DRILL REPORT

Objective:

Sampled:

**312**

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.

Logged By:

Date: **September 23, 1970**

Composites:

Block:

Sect.:

Place:

**GREEN HILLS**

App. Bear:

App.: Dip.:

Length:

From	To	Discard:	Reason:
		<b>Started September 15, 1970</b>	<i>Revised by radiation log</i>
0	73	<b>Overburden</b>	
73	101	<b>Mudstone &amp; Sandstone Coal Stringers</b>	
101	134	<b>Sandstone</b>	
134	137	<b>Shale</b>	
137	153	<b>Sandstone</b>	
153	157	<b>Shale</b>	
157	159	<b>Sandstone</b>	
159	235	<b>Sandstone Shale Stringers</b>	
235	241	<b>Shale</b>	
241	265	<b>Coal</b>	<i>240.0 - 264.0</i>
265	276	<b>Shale</b>	
276	290	<b>Sandstone</b>	
290	306	<b>Shale</b>	
306	323	<b>Sandstone, Shale &amp; Mudstone</b>	
323	349	<b>Coal</b>	<i>322.0 - 348.0</i>
349	364	<b>Shale</b>	
364	386	<b>Sandstone</b>	
386	390	<b>Shale</b>	
390	395	<b>Coal</b>	
395	398	<b>Shale</b>	
398	400	<b>Sandstone</b>	

**END HOLE SEPTEMBER 21, 1970**

Core Size

**3 7/8**

Hole No. **EH 176**

Page **1**

FORDING OPERATIONS  
DIAMOND DRILL SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
241.0	265.0	SEAM E				0.2	27.9	19.8	52.1	2,2,2	.30	
		CLEAN COAL				0.7	12.9	21.1	65.3	4,4½,4½	.43	Recovery 76.9%
390.0	395.0	LOWER D				0.1	20.5	19.5	59.9	3,2½,2½	.52	
		CLEAN COAL				0.6	13.6	19.6	66.2	3,2½,3	.57	Recovery 82.6%
323.0	349.0	D				0.3	19.6	19.9	60.2	1½,1½,1½	.30	
		CLEAN COAL				0.6	9.7	20.2	69.4	2½,2½,2½	.43	Recovery 83.3%

# Diamond Drill Geological Log



K-FACING 70(3)A-2

Becker Drilling

Objective:

Sampled:

Logged By: W.E. Pearson

Date: July 24, 1970

Composites:

312

Block:

Sect.:

Place:

App. Bear:

App. Dip:

Length:

Green Hills

From To Discard:

Reason:

Revised by radiation log

0	37	Overburden		
37	48.5	Coal	32.0 - 48.0	4818, 4819, 4820
48.5	95	Shale		
95	104	Sandstone		
104	119	Coal	106.0 - 117.0	4821, 4822, 4823
119	126	Shale		
126	136	Sandstone		
136	143	Coal	136.0 - 142.0	4824, 4825
143	189	Sandstone		
189	197	Sandy shale coal stringers		
197	204	Sandstone coal stringers		
204	207	Brown shale & Coal		
207	212	Coal		4826, 4827
212	225	Sandy shale		

End hole July 25/70

Core Size

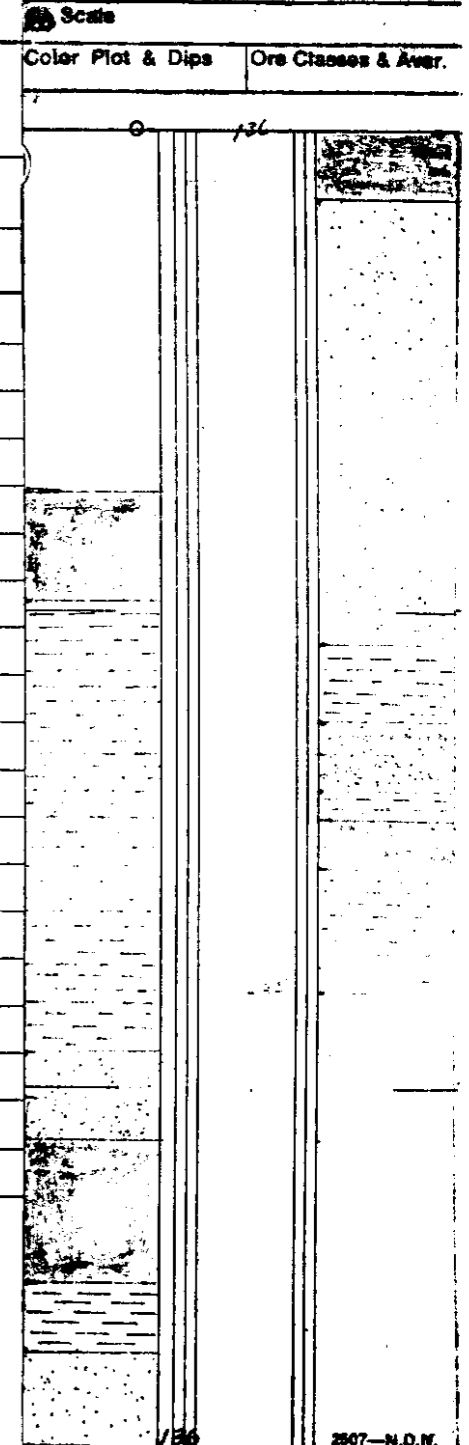
4 1/2"

Hole No.

RH 178

Page

1



FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	PSI	S	REMARKS
37.0	48.5	Seam "E" RAW COAL					0.3	24.8	21.9	53.0	5½, 5½, 5	0.30	
		CLEAN COAL					0.6	10.6	22.9	66.0	7.7½, 7½	0.44	72.7 % Recovery
104.0	119.0	Seam "Upper D" RAW COAL					0.5	26.5	18.7	54.3	3½, 3½, 3½	0.49	
		CLEAN COAL					0.5	9.0	20.7	69.9	3, 3½, 3½	0.34	82.3 % Recovery
136.0	143.0	Seam "Lower D" RAW COAL					0.6	46.5	15.2	37.7	1, 1, 1	0.36	
		CLEAN COAL					0.6	12.4	21.0	66.0	3, 3½, 3½	0.59	39.8 % Recovery
207.0	212.0	Seam "B" RAW COAL					0.5	73.3	9.8	16.4	0.1, A.	0.5	
		CLEAN COAL					0.6	20.1	19.8	59.5	5½, 6, 6	0.69	8.7 % Recovery



# Diamond Drill Geological Log



## BECKER DAILY DRILL REPORT

Objective:

Sampled:

**312**

Logged By:

Date: **September 29, 1970**

Composites:

Block:

Sect.:

Place:

App. Bear:

App.: Dip.:

Length:

From To **Piece:** Reason:

**Started: September 25, 1970**

0	20	Overburden
20	101	Shale
101	117	Shattered Shale
117	118	Sandstone
118	121	Sandy Shale
121	123	Shattered Sandy Shale
123	127	Shale
127	129	Shale
129	139	Sandy Shale
139	149	Shattered Sandstone
149	164	Sandy Shale
164	170	Shale
170	176	Shale
176	191	Shale
191	200	Sandy Shale

**HOLE COMPLETED: September 26, 1970**

Core Size

**3 7/8**

Hole No. **BR 179**

Page **XXXXXX**

**1**

40 Scale

Color Plot & Dips

Ore Classes & Aver.

# Diamond Drill Geological Log



BECKER DAILY DRILL REPORT

312

Objective:

Sampled:

Logged By: Date: September 29, 1970

Composites:

Block: Sect.: Place: App. Bear: App. Dip.: Length:

From	To	Remark:	Reason:
		Started: September 26, 1970	
0	8	Overburden	
8	18	Shattered Shale	
18	26	Hard Shale	
26	55	Shale	
55	65	Sandy Shale	
65	83	Coal	64.0 - 80.0
83	88	Shale	
88	89	Coal Stringer	86.0 - 88.0
89	96	Shale	
96	118	Shattered Sandstone	
118	146	Sandy Shale	
146	151	Shale	
151	173	Shattered Sandstone	
173	190	Coal	172.0 - 187.0
190	195	Shattered Shale	
195	206	Shattered Sandy Shale	
206	210	Sandy Shale	
210	251	Shale	
251	255	Shale & Coal	247.0 - 264.0
255	265	Coal	
265	283	Sandy Shale	
283	284	Shattered Sandstone	
284	290	Shale	
290	294	Sandy Shale	
294	300	Shale	

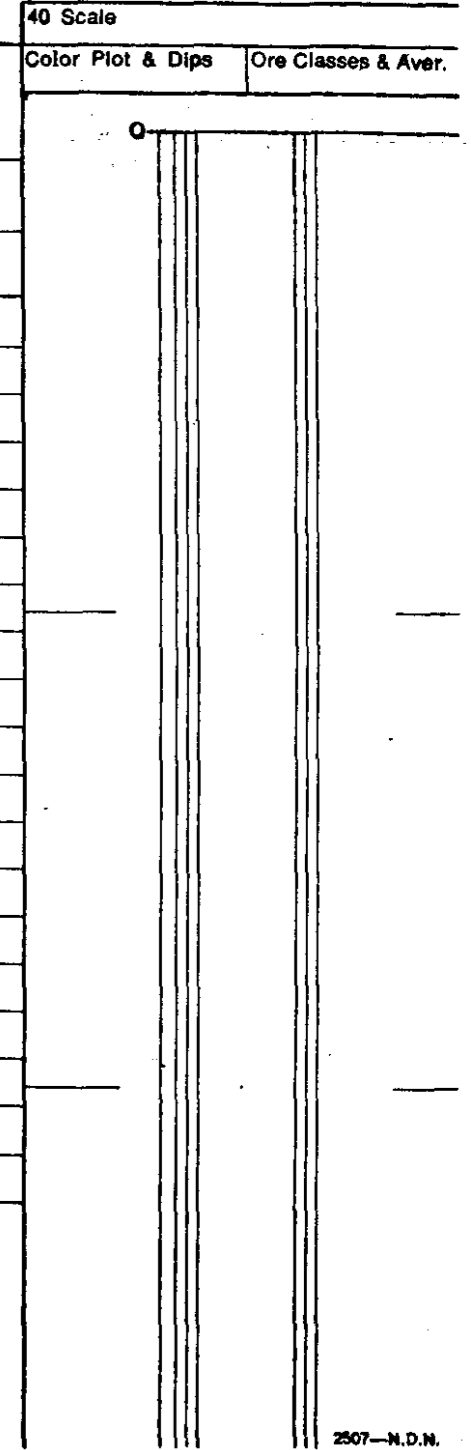
*Revised by radiation log*

Core Size  
3 7/8

Hole No. RH 180

Page 1

HOLE COMPLETED: September 28, 1970



/

FORDING OPERATIONS  
DIAMOND DRILL SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
65.0	83.0	UPPER E RAW COAL				0.8	26.5	19.0	53.7	3½, 3½, 3½	.47	
		CLEAN COAL				0.8	12.9	21.8	64.4	6.5½, 6	.49	Recovery 72.7%
171.0	190.0	LOWER E RAW COAL				0.8	28.4	18.5	52.3	5½, 5½, 5½	.33	
		CLEAN COAL				0.9	14.3	22.2	62.6	8½, 8, 8	.55	Recovery 77.6%
255.0	265.0	D RAW COAL				0.8	11.7	19.3	68.2	8½, 3½, 3½	.25	
		CLEAN COAL				0.8	8.8	20.8	69.4	4½, 5, 4½	.33	Recovery 93.2%

# Diamond Drill Geological Log



K-FACING 70(3)A-2

## BECKER DAILY DRILL REPORT

Objective:

Sampled:

Logged By:

Date: **September 29, 1970**

Composites:

**312**

Block:

Sect.:

Place:

*Green Hills*

App. Bear:

App.: Dip.:

Length:

From To **REMARK**  
Started: September 23, 1970

Reason: *Revised by radiation log*

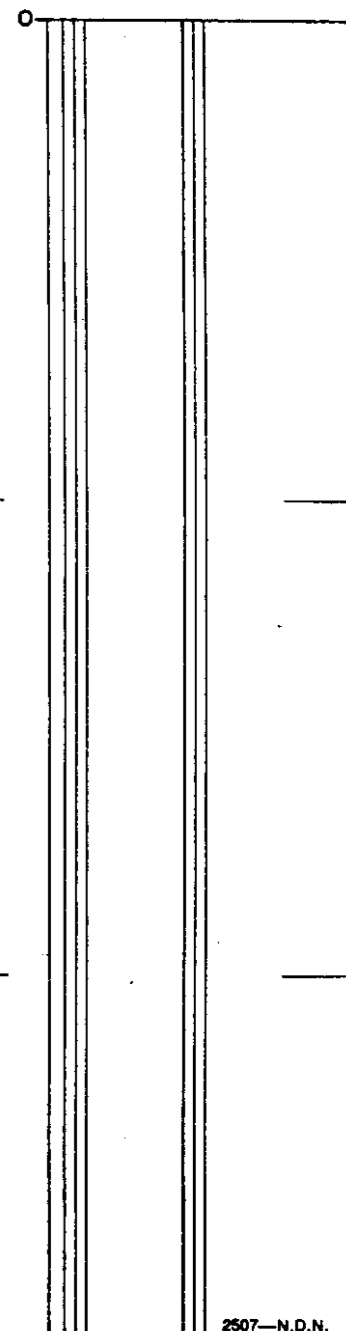
0	30	Overburden
30	35	Shale
35	51	Coal <i>33.0 - 48.0</i>
51	59	Sandy Shale
59	60	Sandstone
60	65	Sandy shattered formation
65	66	Coal Stringer
66	68	Shale
68	71	Sandy Shale
71	78	Sandy, shattered shale
78	87	Sandstone
87	95	Sandy Shale
95	98	Sandstone
98	112	Shale stringers
112	117	Shale Stringers
117	118	Shale Stringers
118	126	Sandstone
126	131	Shattered Sandstone
131	145	Sandy Shale
145	149	Sandstone
149	150	Shattered Sandstone
150	154	Sandstone - Shale
154	156	Sandstone

Core Size **3 7/8**

Hole No. **RH 181**

Page **1** of **2**

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



# Diamond Drill Geological Log



BECKER DAILY DRILL REPORT

Objective:

Sampled:

Logged By: Date: **September 29, 1970**

Composites:

Block: Sect.: Place: App. Bear: App.: Dip.: Length:

From To Discard: Reason:

From	To	Discard:	Reason:
156	158	Brown Shale	
158	161	Sandstone	
161	176	Sandstone	
176	189	Sandstone	
189	191	Sandstone, shattered	
191	194	Sandstone, shattered	
194	197	Sandstone	
197	199	Sandy Shale	

HOLE COMPLETED: **September 25, 1970**

Core Size

Hole No. **RH 181**

Page **2** of **2**

40 Scale
Color Plot & Dips
Ore Classes & Aver.

# Diamond Drill Geological Log



K-FORGING 70/31A-2

## BECKERS DRILL LOG

Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

Logged By: **EPS** Date: **SEPT. 17/70** Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: **Green hills** App. Bear: \_\_\_\_\_ App.: Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

**312**

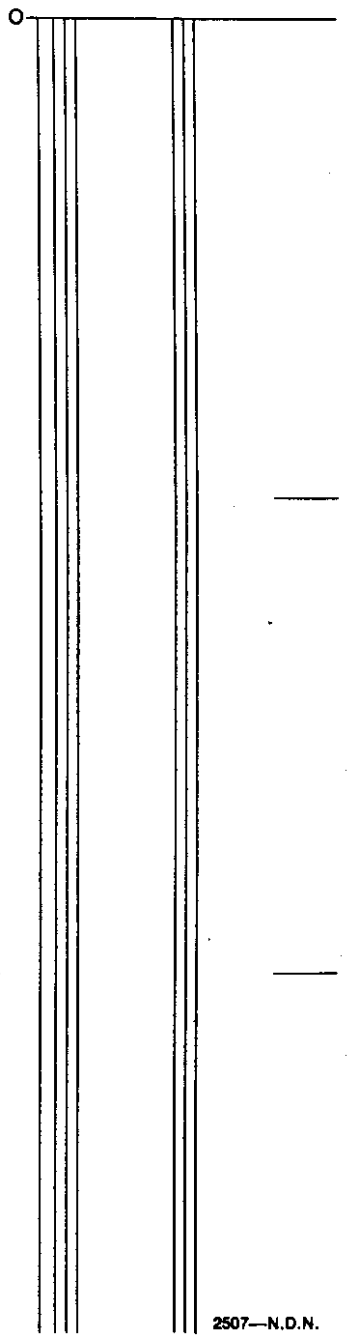
From	To	Discard:	Reason:
0	75	Overburden	
75	115	Sandstone	
115	190	Shale	
190	203	Coal	191.0 - 208.0
203	204	Shale	
204	213	Coal	
213	214	Shale	
214	217	Coal	
217	221	Shale	
221	224	Coal	222.0 - 225.0
224	235	Shale	
235	252	Sandstone	
252	265	Coal	251.0 - 261.0
265	355	Sandstone, Shale, Mudstone, Coal Stringers	344.0 - 363.0

*Revised by radiation log*

355.0 END

Core Size	
Hole No.	Page
RH 182	1

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



**FORDING OPERATIONS**  
**DIAMOND DRILL SAMPLING RECORD**

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
17.0	21.0	MINOR RAW COAL				0.8	34.3	19.1	45.8	4,4,4½	.60	
		CLEAN COAL				0.5	20.4	22.2	56.9	7½,8,7½	.80	Recovery 95.0%
190.0	217.0	UPPER E RAW COAL				0.8	35.8	28.0	35.4	3,2½,3	.33	
		CLEAN COAL				0.6	16.6	21.6	61.1	7,7½,7	.55	Recovery 57.5%
221.0	224.0	UPPER E RAW COAL				0.9	62.8	12.1	24.5	1½,2,2	.27	
		CLEAN COAL				0.6	20.1	22.0	57.3	9,9,9	.74	Recovery 35.0%
252.0	265.0	LOWER E RAW COAL				0.7	32.1	18.8	48.4	6,6,6½	.36	
		CLEAN COAL				0.6	9.7	22.4	67.3	7½,7½,7½	.58	Recovery 74.1%
365.0	383.0	UPPER D RAW COAL				0.7	16.2	20.0	63.1	4,4,4	.25	
		CLEAN COAL				0.7	8.8	20.9	69.6	4,4,4	.34	Recovery 87.2%

# Diamond Drill Geological Log



K-FROENG 70(3)A-2

BECKER DRILL LOG

Objective:

Sampled:

312

Logged By:

Date: October 8, 1970

Composites:

Block:

Sect.:

Place: *Green hills*

App. Bear:

App. Dip:

Length:

From

To

Discard:

Reason:

Started: September 17, 1970

*Revised by radiation log*

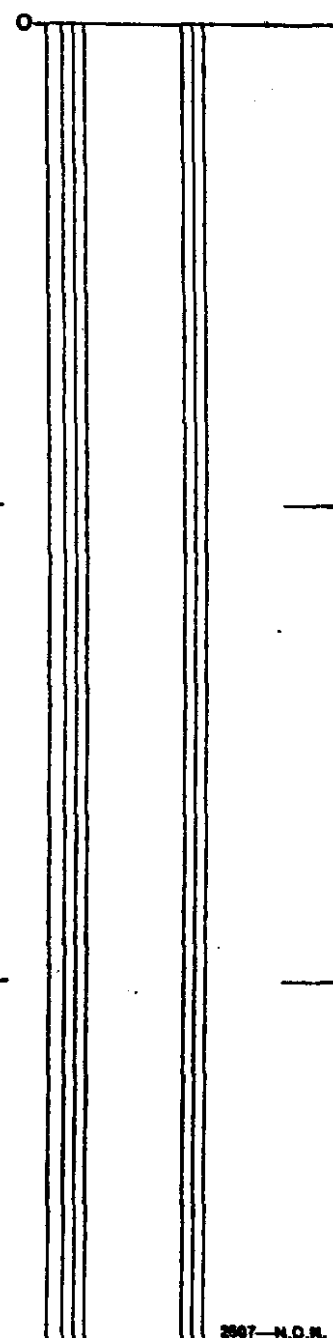
0	29	Overburden	(25 - 26 = Coal stringer in overburden:- 26 - 27 = Shale in overburden:- 27 - 29 = Coal in overburden, not sampled)
29	64	Coal	<i>25.0 - 62.0</i>
64	68	Brown shale	
68	80	Sandstone	
80	82	Sandy shale	
82	110	Sandy shale	<i>105.0 - 110.0</i>
110	114	Shale and coal	<i>113.0 - 120.0</i>
114	116	Shale	
116	124	Shattered sandstone	
124	145	Sandstone	
145	158	Sandstone	
158	172	Sandstone	
172	174	Sandy shale	
174	175	Shattered sandstone	
175	180	Sandstone	
180	198	Sandstone	
198	211	Sandstone	
211	212	Shattered sandstone	
212	213	Sandstone	
213	219	Sandstone	<i>216.0 - 244.0</i>
219	221	Brown shale	
221	224	Coal - shale mix	

Core Size *3 7/8"*

Hole No. RH 183

Page 1 of 2

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.





# Diamond Drill Geological Log



BECKER DRILL LOG

40 Scale

**Objective:** \_\_\_\_\_ **Sampled:** \_\_\_\_\_

**Color Plot & Dips** **Ore Classes & Aver.**

**Logged By:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Composites:** \_\_\_\_\_

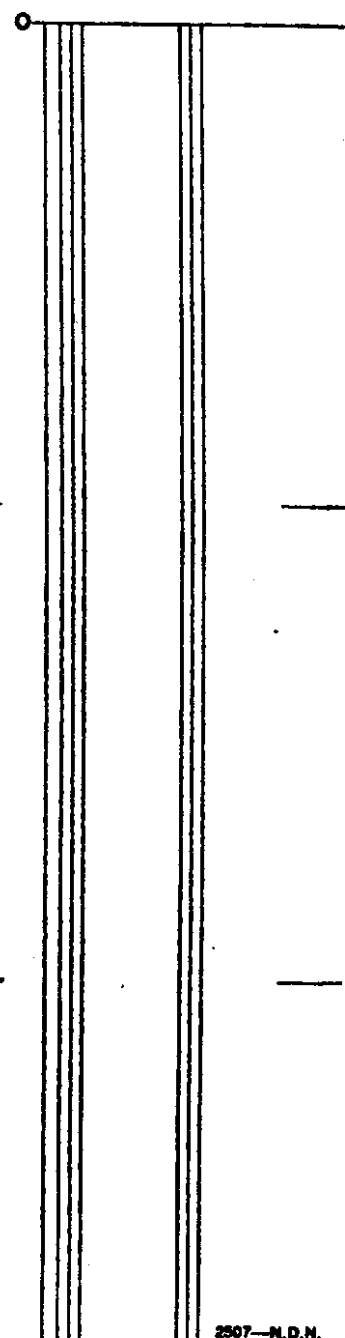
Block:	Sect.:	Place:	App. Bear:	App. Dip.:	Length:
--------	--------	--------	------------	------------	---------

From	To	Discard:	Reason:
------	----	----------	---------

224	242	Coal	
242	245	Brown shale	
245	246	Coal stringer	
246	249	Brown shale	
249	251	Sandstone	
		251.0 END	

**Core Size** 3 7/8"

**Hole No.** RH 183



FORDING OPERATIONS  
DIAMOND DRILL SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
29.0	60.0	D RAW COAL				0.1	14.5	20.7	64.7	3, 3 $\frac{1}{2}$ , 3	.36	
		CLEAN COAL				0.7	8.2	20.3	70.2	2 $\frac{1}{2}$ , 2 $\frac{1}{2}$ , 2 $\frac{1}{2}$	.34	Recovery 89.6%
60.0	64.0	C RAW COAL				0.1	11.4	20.3	68.2	2 $\frac{1}{2}$ , 3, 2 $\frac{1}{2}$	.30	
		CLEAN COAL				0.6	9.0	19.8	70.7	2 $\frac{1}{2}$ , 2 $\frac{1}{2}$ , 2 $\frac{1}{2}$	.32	Recovery 91.1%
221.0	242.0	B RAW COAL				1.0	34.2	18.6	46.2	3, 3, 3	.27	
		CLEAN COAL				1.1	16.9	19.3	62.6	4, 4, 4	0.31	Recovery 53.7%

# Diamond Drill Geological Log



K-FACDING 70(3)A-2

## BECKER DRILL LOG

Objective:

Sampled:

312

Logged By: EPS

Date: SEPT. 17/70

Composites:

Block:

Sect.:

Place:

App. Bear:

App. Dip.:

Length:

From To Discard Reason:

0	20	Overburden	
20	22	Sandstone	
22	30	Brown Shale	
30	33	Sandstone	
33	38	Brown Shale	
38	43	Sandstone	
43	50	Sandstone	
50	52	Sandy Shale	
52	60	Sandstone	
60	85	Coal	56.5 - 84.0
85	87	Coal & Shale	
87	92	Sandy Shale	
92	104	Sandstone	
104	116	Sandy Shale	
116	129	Sandstone	
129	131	Shale & Coal	130.0 - 135.0
131	132	Shale	
132	133	Coal Stringer	
133	139	Brown Shale	
139	140	Coal Stringer	138.0 - 146.0
140	142	Brown Shale	
142	159	Sandstone	
159	160	Coal Stringer	

Core Size

Hole No. RH 184

Page 1

40 Scale

Color Plot & Dips

Ore Classes & Aver.

# Diamond Drill Geological Log



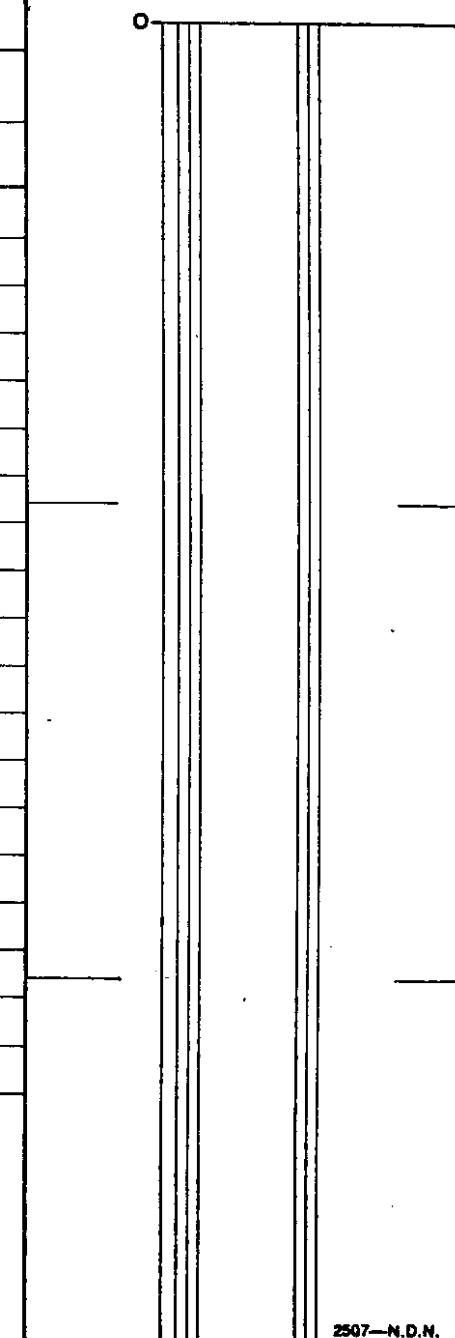
## BECKER DAILY DRILL REPORT

40 Scale

Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_  
 Logged By: **EPS** Date: **SEPT. 17/70** Composites: \_\_\_\_\_  
 Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App.: Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

Color Plot & Dips \_\_\_\_\_ Ore Classes & Aver. \_\_\_\_\_

From	To	Discard:	Reason:
160	176	Sandstone	
176	189	Sandstone	
189	190	Shale	
190	191	Shattered Sandstone	
191	212	Sandstone	
212	<del>225</del>	Extremely Hard Conglomerate Sandstone	
<del>225</del>	249	Sandstone	
249	250	Shale	
250	275	Coal	264.0 - 292.0
275	281	Shale	
281	290	Mudstone	
		290.°	END



Core Size \_\_\_\_\_  
 Hole No. **R.H. 184** Page **2**

FORDING OPERATIONS  
DIAMOND DRILL SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
60.0	87.0	UPPER D RAW COAL				0.6	19.8	19.9	59.7	7½, 7½, 7½	.36	
		CLEAN COAL				0.6	11.2	20.9	67.4	4, 3½, 4	.36	Recovery 77.5%
265.0	290.0	B RAW COAL				0.6	26.7	18.1	54.6	3, 3, 3	.22	
		CLEAN COAL				0.46	9.6	20.7	69.2	5½, 5½, 5½	.37	Recovery 74.3%

# Diamond Drill Geological Log



K-FACING 70(3)A-2

BECKER DRILL LOG

Objective:

Sampled:

312

Logged By: Date: October 8, 1970

Composites:

Block:

Sect.:

Place: *Greenhills*

App. Bear:

App. Dip.:

Length:

From

To

~~Interval~~

Reason:

September 12, 1970

*Revised by Radiation Log*

0	22	Surface casing	
22	40	Overburden	
40	68	Sandy, shattered sandstone	
68	69	Black shale	
69	77	Coal	<i>66.0 - 73.5</i>
77	82	Coal, mixed with shale	
82	84	Shale	
84	87	Sandstone	
87	101	Shattered sandstone	
101	149	Sandstone	
149	175	Sandstone	

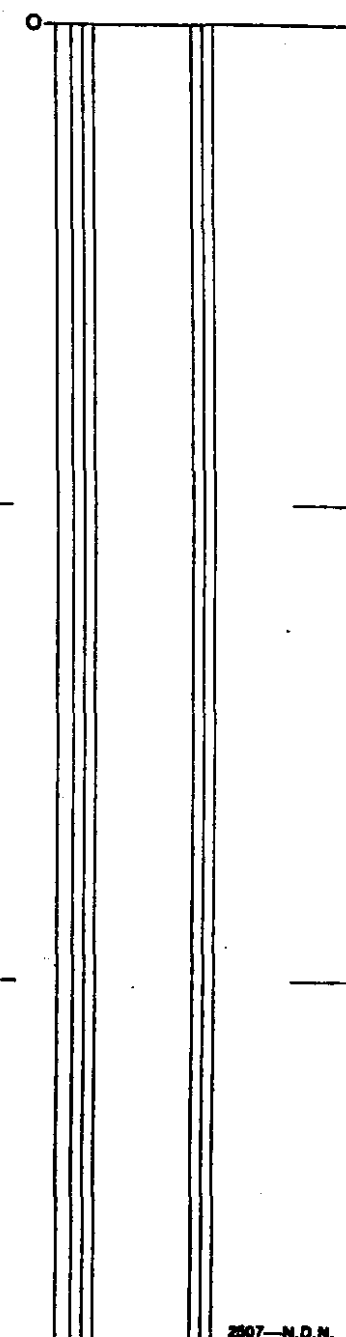
175.0 END

Core Size *3 7/8*

Hole No. RH 185

Page 1

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
66	74	Seam "D"?					0.5	48.2	16.4	34.9	1,1,1	.30	
		CLEAN COAL					1.1	19.0	18.8	61.1	2 <sup>1</sup> / <sub>2</sub> , 3, 2 <sup>1</sup> / <sub>2</sub>	.72	38.9 % Recovery

# Diamond Drill Geological Log



K-FORING 70(3)A-2

Objective:

Sampled:

**312**

Logged By: \_\_\_\_\_ Date: \_\_\_\_\_

Composites:

Block: \_\_\_\_\_

Sect.: \_\_\_\_\_

Place: *Green hills*

App. Bear: \_\_\_\_\_

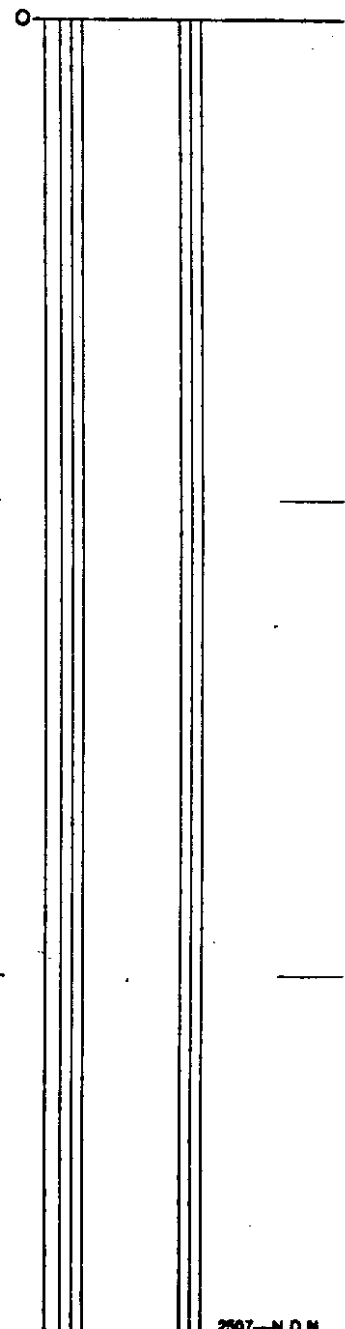
App. Dip.: \_\_\_\_\_

Length: \_\_\_\_\_

From	To	Discard:	Reason:
0	11	Overburden	
11	33	Sandy shale	
33	40	Coal	
40	52	Shale	
52	105	Sandy shale	
105	140	Sandstone	
140	195	Hard sandy shale (Probably sandstone)	
195	203	Sandstone	
203	205	Shale	
205	212	Sandstone	
212	222	Shale	
222	246	Coal - parting 229 - 231	<i>223.0 - 242.0 parting 230.0 - 232.0</i>
246	254	Shale	
254	267	Coal	<i>254.0 - 268.0</i>
267	282	Shale	
282	302	Sandstone	
302	325	Sandyshale, coal @ 302 - 305, 311	
325	341	Sandstone	
341	348	Shale	
348	371	Coal, parting of shale 359 - 360	<i>346.0 - 372.0</i>
371	375	Shale	
375	407	Sandstone	
407	415	Shale	

*Revised by Radiation Log*

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



Core Size

Hole No. RH 186

Page 1



# Diamond Drill Geological Log



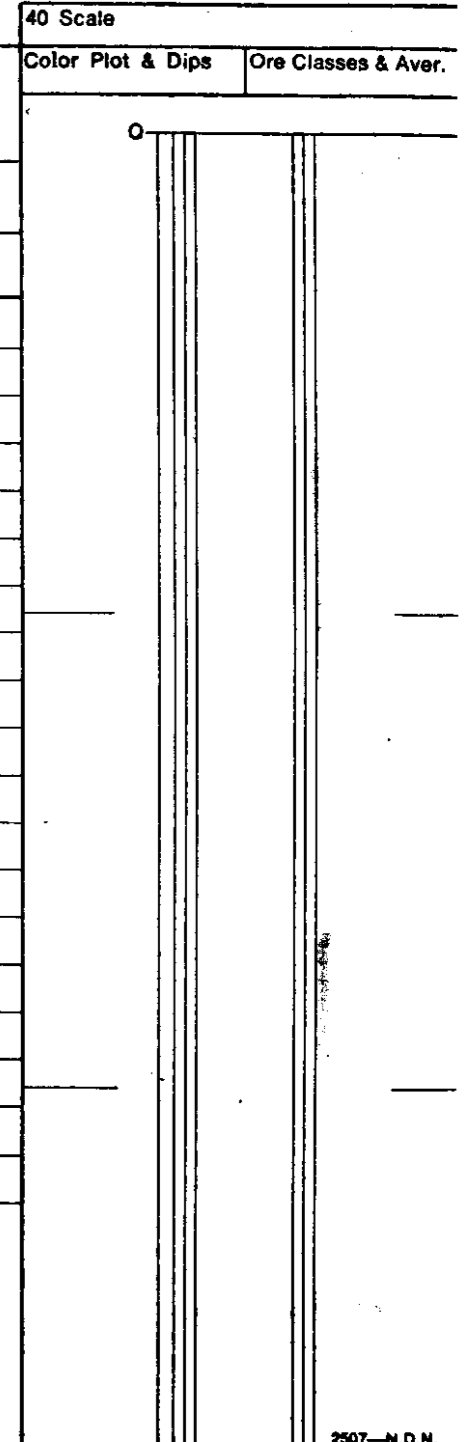
Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

Logged By: **D.M.** Date: \_\_\_\_\_ Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App.: Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From	To	Discard:	Reason:
415	417	Coal	414.0 - 418.5
417	418	Shale	
418	419	Coal	
419	420	Shale	
420	425	Sandstone	
425	427	Shale	
427	432	Coal	426.0 - 432.0
432	438	Shale	
438	452	Sandstone	
452	457	Shale	
457	503	Sandstone	
503	509	Sandstone with coal traces	
509	529	Sandstone, coal traces 524 - 536	
529	533	Sandy shale	
533	542	Coal	532.0 - 540.0
542	543	Shale	
543	545	Coal	
545	546	Shale	
546	547	Coal	
547	554	Shale with coal traces	
554	560	Sandstone	

Core Size \_\_\_\_\_  
 Hole No. **RH 186** Page **2**



# Diamond Drill Geological Log



Objective:

Sampled:

Logged By:

Date:

Composites:

Block:

Sect.:

Place:

App. Bear:

App.: Dip.:

Length:

From	To	Discard:	Reason:
------	----	----------	---------

533	542	Coal	
542	543	Shale	
543	545	Coal	
545	546	Shale	
546	547	Coal	
547	554	Shale with coal partings	
554	560	Sandstone	

40 Scale

Color Plot & Dips    Ore Classes & Aver.

Core Size

Hole No. **RH 186**

Page **3**

FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
35.0	40.0	Seam "Part of F?"					0.9	42.3	17.7	39.1	4, 4½, 4½	0.71	
		CLEAN COAL					0.5	10.4	24.6	64.5	8½, 8½, 8½	1.07	41.3 % Recovery
222.0	246.0	Seam "Upper E"					0.8	38.7	17.8	42.7	3½, 3½, 3½	0.22	
		CLEAN COAL					0.4	14.3	22.6	62.7	7, 7, 7	0.38	53.0 % Recovery
254.0	267	Seam "Lower E"					0.7	23.1	21.5	54.7	7, 7, 7	0.41	
		CLEAN COAL					0.5	9.9	23.1	66.5	8, 8, 8	0.56	76.6 % Recovery
346.0	372	Seam "Upper D"					0.7	20.2	18.8	60.3	3, 3, 3	0.27	
		CLEAN COAL					0.5	10.3	20.5	68.8	3, 3, 3	0.47	81.0 % Recovery
415.0	419.0	Seam "Part of Lower D"					0.6	20.5	18.0	60.9	4½, 4½, 4½	0.66	
		CLEAN COAL					0.3	11.3	19.5	68.9	3, 3, 2½	0.61	77.6 % Recovery
427.0	432.0	Seam "Lower D"					0.6	30.4	17.6	51.4	2, 2, 2	0.44	
		CLEAN COAL					0.4	12.5	20.5	66.6	4½, 4½, 4½	0.55	69.3 % Recovery
533.0	547.0	Seam "B"					0.8	31.3	16.9	51.0	2½, 2½, 2½	0.36	
		CLEAN COAL					0.8	12.2	21.0	66.1	4½, 4½, 4	0.44	31.5 % Recovery

# Diamond Drill Geological Log



K-FALGONE 70(3)A-2

Objective: **Becker Drill Log** Sampled: **312** 40 Scale  
 Logged By: **D.M.** Date: **Aug. 8/70** Composites: Color Plot & Dips Ore Classes & Aver.

Block: Sect.: Place: **Green hills** App. Bear: App.: Dip.: Length:

From	To	Discard:	Reason:
0	10	Overburden	Revised by radiation log
10	19	Shale	
19	28	Sandstone	
28	32	Shale	
32	70	Sandstone	
70	106	Shale	
106	116	Coal	103.0 - 114.0
116	117	Shale	
117	137	Coal	118.0 - 134.0
137	139	Shale	
139	140	Coal	138.0 - 144.0
140	142	Shale	
142	148	Coal	150.0 - 158.0
148	153	Shale	
153	161	Coal	
161	181	Shale	
181	205	Sandy shale	
205	210	Sandstone, coal traces	
210	222	Sandstone	
222	226	Shale	
226	231	Sandstone	
231	236	Shale with coal traces	
236	258	Coal	230.0 - 254.0

Core Size  
 Hole No. **RH 187** Page **1**

# Diamond Drill Geological Log



Objective: **Becker Drills** Sampled: 40 Scale

Logged By: **D.M.** Date: **Aug. 12, 1970** Composites: Color Plot & Dips Ore Classes & Aver.

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From	To	Discard:	Reason:
258	285		Sandy Shale
285	309		Sandstone
309	314		Shale <i>310.0 - 314.0</i>
314	315		Coal
315	316		Shale
316	319		Coal <i>320.0 - 327.5</i>
319	323		Shale
323	330		Coal
330	339		Shale
339	340		Coal
340	345		Shale
345	385		Sandstone (Hard)
385	407		Sandstone, traces of coal @ 401 & 405
407	434		Sandstone
434	456		Coal <i>430.0 - 450.0 parting 450.0 - 452.0</i>
456	458		Shale
458	459		Coal
459	462		Shale
462	463		Coal
463	467		Sandy shale & coal partings
467	475		Sandstone

475. End.

Core Size

Hole No.

RH 187

Page

2

FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
106.0	152.0	Seam "E" RAW COAL					0.5	31.2	19.9	48.4	5½, 5.5	0.33	
153.0	161.0	CLEAN COAL					0.6	8.6	23.4	67.3	8, 8, 7½	0.41	56.8 % Recovery
236.0	255.0	Seam "D" RAW COAL					0.6	23.5	20.0	55.9	5, 4½, 4½	0.30	
258.0	260.0	CLEAN COAL					0.6	10.7	28.5	60.2	5½, 6, 5½	0.33	73.9 % Recovery
314.0	319.0	Seam "Lower D" RAW COAL					0.5	17.3	20.8	61.4	4½, 4½, 4½	0.44	
323.0	330.0	CLEAN COAL					0.5	10.4	21.2	67.9	4, 4, 4½	0.49	89.4 % Recovery
434.0	456.0	Seam "B" RAW COAL					0.6	20.1	19.7	59.6	4½, 4½, 4	0.33	
458.0	460.0	CLEAN COAL					0.6	8.2	20.4	70.7	4½, 4½, 4½	0.34	72.8 % Recovery

# Diamond Drill Geological Log



K-FARROWING 7:(3)A-2

## Becker Daily Drill Report

Objective:

Sampled:

Logged By: J.D.D.

Date: Sept. 9, 1970

Composites:

312

Block:

Sect.:

Place:

App. Bear:

App.: Dip.:

Length:

Green hills

From To Discard: Reason:

0	26	Overburden	
26	41	Soft Brown Shale	
41	65	Sandy shattered shale	
65	82	Shale with coal	
80	82	Coal stringer	
82	86	Shale	
86	88	Coal Stringer	
88	96	Sandy shale	
96	102	Sandstone	
102	116	Shattered Sandstone	
116	134	Sandy shale	
134	146	Sandstone	
146	149	Shattered Sandstone	
149	155	Hard sandstone	
155	158	Shattered sandstone	
158	162	Sandstone (shattered sandstone 161' - 162')	
162	170	Shattered sandstone	
170	187	Sandstone	
187	199	Sandstone	
199	201	Sandy shale	
201	206	Shale	
206	239	Coal (237' - 239' shale mixed coal)	
239	251	Shale (246' - 251' mudstone)	

Core Size

Hole No.

RH 188

Page

1

40 Scale

Color Plot & Dips

Ore Classes & Aver.

0

FORDING OPERATIONS  
 DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
206	235	Seam "B" RAW COAL					0.4	17.9	19.6	62.1	3,3½,3	.43	
		CLEAN COAL					1.2	8.9	21.3	68.7	4,4,4	.51	84.7 % Recovery



# Diamond Drill Geological Log



K-FORGING 70(3)A-2

## BECKER DRILL LOG

Objective:

Sampled: **312**

Logged By: J.D.D.

Date: SEPT. 9/70

Composites:

Block:

Sect.:

Place:

*Green hills*

App. Bear:

App. Dip.:

Length:

From To Discard:

Reason:

*Revised by Radiataa log*

0	41	Overburden
41	60	Shattered Sandstone
60	69	Sandy Shale
69	71	Sandstone
71	84	Sandy Shale
84	131	Coal (Shale + Coal 84-86) + (121-131)
131	135	Shale

135.° END

Core Size

Hole No.

RH 189

Page

1

40 Scale

Color Plot & Dips

Ore Classes & Aver.

FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION		SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
86	131	Seam "E"	RAW COAL					0.7	25.3	ND	ND	4½,5,5	ND	
			CLEAN COAL					1.3	11.4	22.8	64.5	7,7,7½	.45	74.2 % Recovery

# Diamond Drill Geological Log



K-FOROSING 76131A-2

Objective: M & M DRILLING CO. LOG

Sampled: **312**

Logged By: Date: October 14, 1970

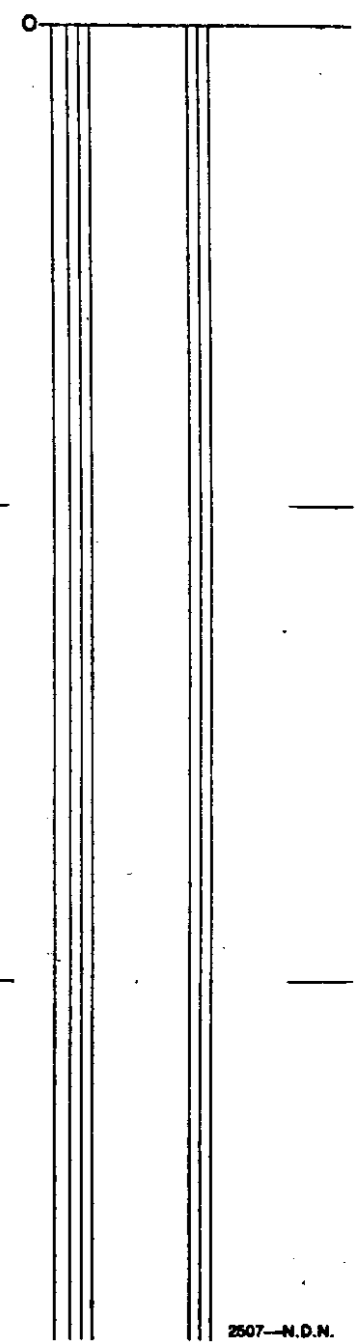
Composites:

Block: Sect.: Place: App. Bear: App.: Dip.: Length:

From	To	Discard:	Reason:
0	52	Overburden	REVISED by Gamma ray-neutron log
52	76	Mudstone to siltstone	
76	84.5	Sandstone	
84.5	94	Mudstone	94.0 - 114.5
94	127	Coal, with shale parting 115 to 117.5	118.5 - 123.5
127	136	Interbedded mudstone and siltstone	
136	144	Coal	136.0 - 144.0
144	172	Mudstone and siltstone	
172	180	Sandstone	
180	202	Mudstone	
202	257	Coal - Good quality	202.0 - 257.0
257	259	Shale	
259	264	Coal	259.0 - 264.0
264	267.5	Sandstone	
267.5	284	Shale	
284' End of Hole			

**NOT SAMPLED**  
**SINGLE WALL PIPE**

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



Core Size 4 1/2" Rotary Hole

Hole No. RH 191

Page 1

# Diamond Drill Geological Log



K-FAKONG 70(3)A-2

Objective: M & M DRILLING CO. LOG

Sampled: **312**

Logged By: \_\_\_\_\_ Date: October 14/70

Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From	To	Discard:	Reason:
0	12	Overburden, glacial till	<b>NOT SAMPLED - SINGLE WALL PIPE</b>
12	22	Hard rock	
22	29	Hard shale	
29	31	Rock	
31	36	Hard shale	
36	37	Softer shale, dark colour	
37	61	Hard Shale, some water at 55 feet	<i>Revised by radiation logs</i>
61	85	Hard Shale	
85	115	Coal	<i>Coal 80.0 to 112.5'</i>
115	128	Hard shale	
128	134	Sandstone, some water	
134	136	Softer shale	
136	138	Hard shale	
138	139	Softer shale	
139	178	Hard shale and rock ledges	
178	216	Coal	<i>Coal 174.0 to 217.5'</i>
216	237	Hard shale with soft ledges	<i>Coal 225.0 to 232.5'</i>
237	239	Coal seam	
239	248	Hard shale	
248	262	Very hard sandstone rock	
262	323	Very hard shale	
323' End of Hole			

40 Scale

Color Plot & Dips    Ore Classes & Aver.

Core Size 4 1/2" Rotary Hole

Hole No. RH 192

Page 1

# Diamond Drill Geological Log



K- FORDING 70(3) A-2

Objective: M.+M. Drilling

Sampled: No Samples Collected.

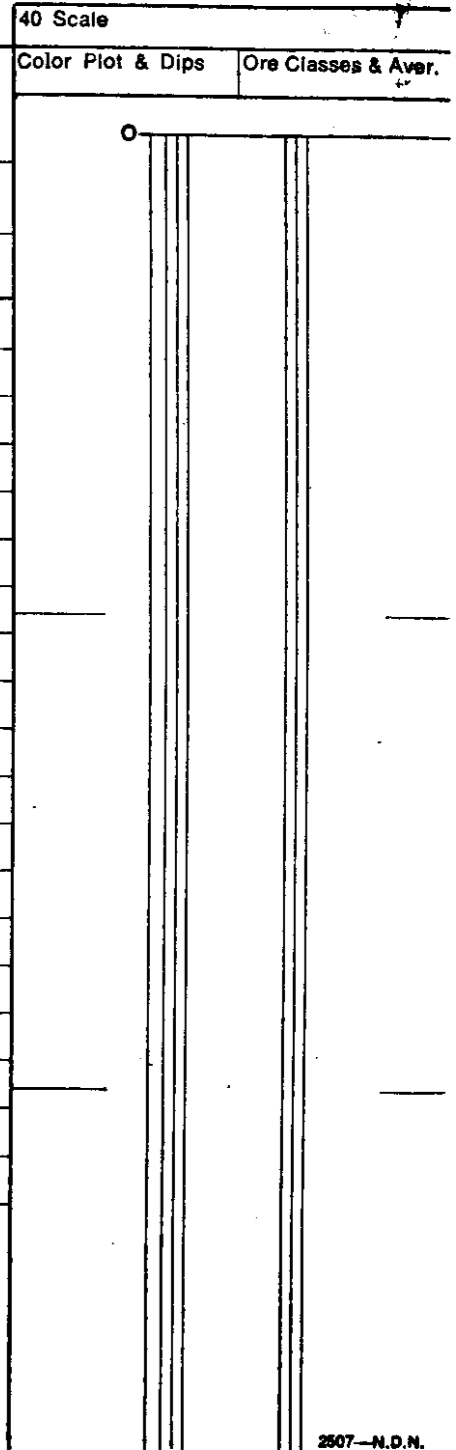
Logged By: Date: Oct. 15/70

Composites:

Block: Sect.: Place: App. Bear: App. Dip.: Length: 312

From	To	Discard:	Reason:
0	22	Hard Till	<i>Revised by radiation log</i>
22	39	Gravel + Boulders Some water at 2 8 ft.	
39	45	Hard Rock	
45	64	Hard Shale	
64	65	Hard Rock A little water	
65	91	Hard Shale lots of water	
91	114	Hard Shale	
114	119	Very hard rock	
119	125	Hard shale some rock stringers	
125	179	Hard shale some rock stringers	
179	216	Coal	<i>Actual = 175.5 - 213.0, shaly 209 - 213.0</i>
216	219	Soft shale	
219	239	Hard shale	
239	240	Soft shale maybe coal stringers	
240	266	Hard shale	
266	300	Coal	<i>265 - 295 Actual</i>
300	309	Hard shale	
309	317	Hard rock	
317	329	Soft shale or coal	<i>314.5 - 319.0 Actually Coal</i>
329	335	Hard shale	

Core Size  
 3 7/8" Rotary Hole  
 Hole No. R.H. 193 r  
 Page



# Diamond Drill Geological Log



K-FOOTING 20(3)A-2

Objective: M & M DRILLING CO. LTD.	Sampled:	<b>312</b>
Logged By:	Date: October 16/70	Composites:

Block:	Sect.:	Place:	App. Bear:	App. Dip.:	Length:
--------	--------	--------	------------	------------	---------

From	To	Discard:	Reason:
0	42	Overburden	(REVISED by Gamma ray-neutron log)
42	61	Shale - sandstone stringers --	water table
61	66	Hardrock	
66	85	Shale - hard	<b>NOT SAMPLED</b> <b>- SINGLE WALL PIPE</b>
85	103	Hard rock	
103	106	Hard shale	
106	121	Hard shale	
121	140	Coal	117.5 - 136.0 Actual
140	145	Shale	136 - 139 s.s., 139 - 145 carb. shale
145	150	Coal	146 - 151 dirty coal
150	165	Hard rock	
165' End of Hole			
Completed Oct. 17/70			

Core Size	4 1/2"
Hole No.	RH 194
Page	1

# Diamond Drill Geological Log



K-FORGE 76(3)A-2

M & M DRILLING

Objective:

Sampled:

Logged By:

Date: December 15, 1970

Composites:

312

Block:

Sect.:

Place:

GREENHILLS

App. Bear:

App. Dip.:

Length:

From To Discard Reason:

From	To	Discard	Reason:
0	40	Overburden	
40	75	Sandstone	
75	117	Sandstone	
117	148	Coal	
148	164	Sandstone	
164	187	Coal	
187	194	Sandstone	
194	198	Coal	
198	225	Sandstone	

40 Scale

Color Plot & Dips

Ore Classes & Aver.

0

Core Size 4 1/2

Hole No. RH. 195

Page 1

# Diamond Drill Geological Log



K-FIELDING 70(3)A-2

M & M DRILL LOG

Objective:

Sampled: **312**

Logged By: Date: December 23/70

Composites:

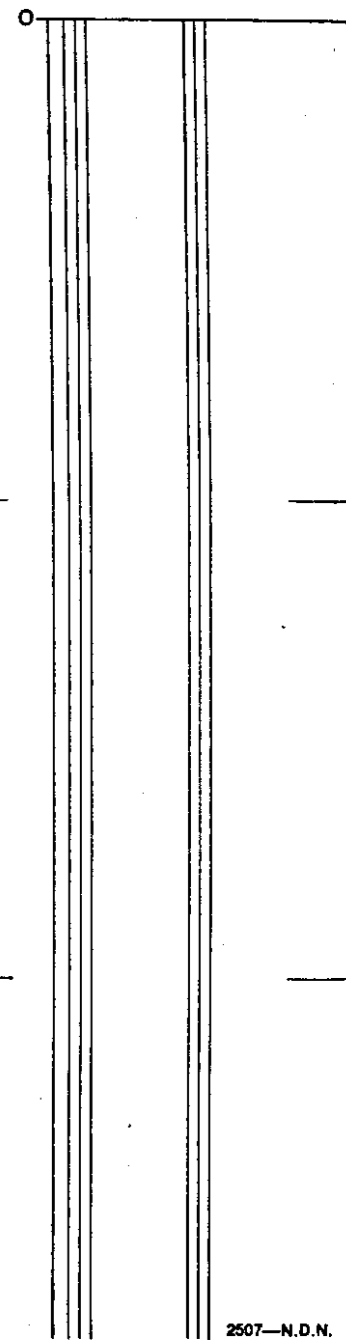
Block: Sect.: Place: **GREENHILLS** App. Bear: App.: Dip.: Length:

From	To	Discard:	Reason:
0	21	Overburden	
21	67	Shale	
67	93	Coal	
93	115	Shale	
115	135	Sandstone	
135	148	Shale	
148	154	Coal	
154	158	Shale	
158	170	Coal	
170	185	Shale	
185	186	Coal	
186	205	Shale	

**NOT SAMPLED  
- SINGLE WALL PIPE**

205' END HOLE

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



Core Size 4 1/2"

Hole No. RH. 196

Page 1



# Diamond Drill Geological Log

M & M DRILL LOG



K-FORGING 7013A-2

Objective:

Sampled: **312**

Logged By:

Date: December 22/70

Composites:

Block:

Sect.:

Place: GREENHILLS

App. Bear:

App. Dip.:

Length:

From To Discard Reason:

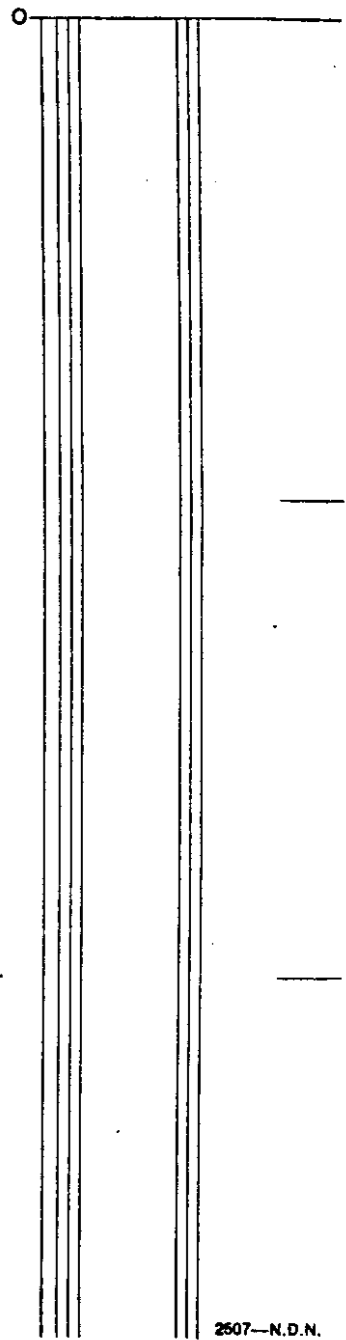
0	30	Overburden	
30	45	Sandstone	
45	60	Shale	
60	75	Shale coal stringer	
75	89	Sandstone (hard)	
89	102	Coal	Coal 79.0 - 102.0
102	126	Sandstone (hard)	
126	133	Coal	
133	205	Sandstone	

**NOT SAMPLED**  
**- SINGLE WALL PIPE**

*Revised by radiation log*

205' END HOLE

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



Core Size  $4\frac{1}{2}$ "

Hole No. RH. 198

Page 1

# Diamond Drill Geological Log

M & M DRILL LOG



K-FORING 70(31A-2)

Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

Logged By: \_\_\_\_\_ Date: December 20/70 Composites: \_\_\_\_\_

**312**

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: GREENHILLS App. Bear: \_\_\_\_\_ App.: Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From	To	Discard:	Reason:
0	35	Overburden	<b>NOT SAMPLED</b> <b>- SINGLE WALL PIPE</b>
35	55	Shale	
55	75	Sandstone (hard)	
75	112	Shale	
112	116	Coal	
116	135	Sandstone	
135	150	Shale	
150	155	Shale coal stringers	
155	165	Sandstone	
165	180	Shale	
180	203	Sandstone	
		203' END HOLE	

40 Scale

Color Plot & Dips

Ore Classes & Aver.

Core Size 1 1/2"

Hole No. RH. 199

Page 1

# Diamond Drill Geological Log



K-FALCONG 70131A-2

McAuley Drilling Co.

Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

Logged By: **W.E. Pearson** Date: **March 1970** Composites: \_\_\_\_\_

**312**

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: **Turnbull** App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From To Discard: Reason:

0	88	Overburden	
88	90	Shale	
90	92	Sandstone	
92	94	Shale	
94	103	Carb. Shale Trace Coal	
103	110	Shale	
110	116.5	Sandstone (fine)	
116.5	128	Carb. Shale	
128	133	Sandstone	
133	136.5	Shale	
136.5	150.5	Sandstone	
150.5	152.5	Carb. Shale	
152.5	155.5	Sandstone	
155.5	156.5	Shale	
156.5	158	Carb. Shale Trace Coal	
158	163.5	Shale	
163.5	165.5	Carb. Shale Trace Coal	163.5 - 167.5 Good Coal
165.5	166.5	Coal Trace Shale	
166.5	169.5	Coal (soft)	
169.5	175	Carb. Shale Trace Coal	
175	179	Shale	172-180 Good Coal
179	181.5	Carb. Shale and soft coal	
181.5	183	Shaley Coal and Shale	

*Revised*

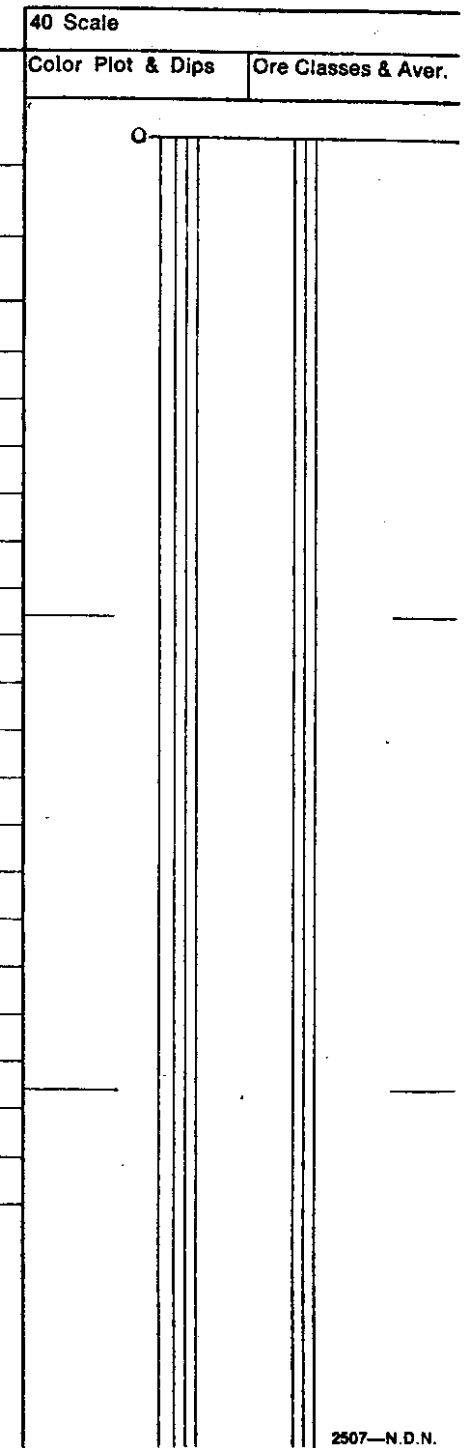
*Day - Neutron Log*

**NOT SAMPLED  
- SINGLE WALL PIPE**

Core Size  $4\frac{1}{2}''$

Hole No. **RH 200**

Page **1**



# Diamond Drill Geological Log

McAuley Drilling



Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

Logged By: **W.E. Pearson** Date: **March 1970** Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: **Turnbull** App. Bear: \_\_\_\_\_ App.: Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

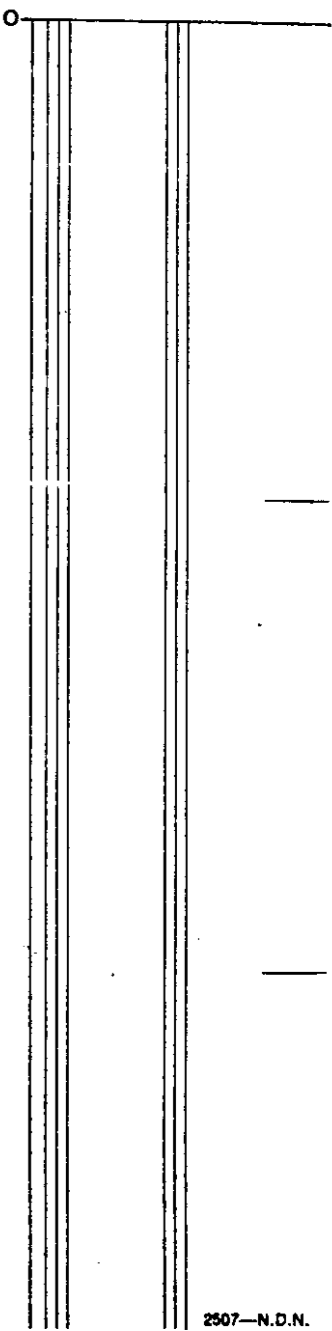
From To Discard: Reason:

183	191.5	Shale trace coal	
191.5	194	Dark Shale Hard Trace Coal at 191.5	
194	205	Shale Trace Coal at 194	
205	213	Shale Hard	<i>205-213.5 Good Coal</i>
213	216.5	Coal	
216.5	221.3	Dark Grey Shale Hard	<i>213.5-222.5 Good Coal</i>
221.3	225	Coal	
225	246	Dark Grey Shale Trace Coal 228 to 229	<i>242-248.0 Good Coal</i>
246	247	Coal Soft	
247	260	Shale Trace Coal	
260	279	Siltstone Very Hard	
279	286.5	Sandstone Dark Grey	
286.5	305	Shale (Hard) Siltstone Stringers Trace Coal at 287	
305	317.5	Shale Some Carb. Shale	
317.5	318.5	Coal Trace Carb. Shale	<i>317.5-319.5 Coal, fair</i>
318.5	321	Shale	
321	326	Coal Soft	<i>324.5-330.0 Good Coal</i>
326	328.5	Shale (Carb. Shale)	
328.5	330.5	Coal Soft with Carb. Shale	
330.5	333	Coal Soft	
333	335.5	Carb. Shale	
335.5	342	Shale (Carb. Shale)	
342	344.5	Siltstone	

Core Size  
**4 1/2"**

Hole No. **RH 200** Page **2**

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



# Diamond Drill Geological Log



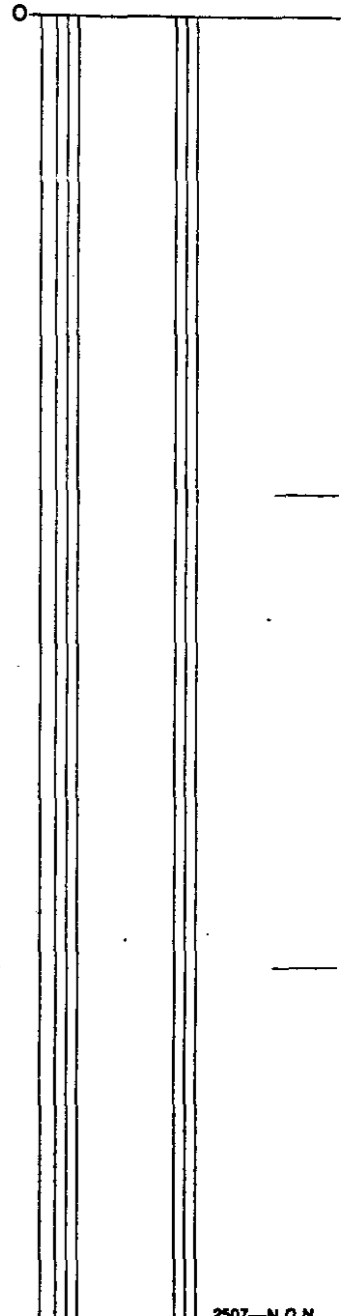
McAuley Drilling

Objective:		Sampled:		40 Scale	
Logged By: <b>W.E. Pearson</b>		Date: <b>March 1970</b>		Composites:	
Block:	Sect.:	Place: <b>Turnbull</b>	App. Bear:	App. Dip.:	Length:
Color Plot & Dips	Ore Classes & Aver.				

From	To	Discard:	Reason:
344.5	356.5	Shale (Carb. Shale)	
356.5	363.5	Siltstone Very Hard	
363.5	365	Shale (Carb. Shale)	
365	371	Shale Dark Grey	
371	380	Siltstone	
380	385	Shale Siltstone Stringers	
385	410	Siltstone, very hard	Reported drilled to 410 ft. Gamma Ray - Ind. core run to 397 ft. Logged 0-399 ft.
		End Hole	

Core Size  
4 1/2"

Hole No. **RH 200** Page **3**



# Diamond Drill Geological Log

McAuley Drilling Co.



K-FAROEING 70(3)A-2

20

Objective:

Sampled:

Logged By: **W.E. Pearson**

Date:

Composites:

**312**

Block:

Sect.:

Place:

**Turnbull Mtn.**

App. Bear:

App. Dip.:

Length:

From To Discard: Reason:

0	129	Overburden	
129	133	Gray sandy shale	Coal 130.5-130.8
133	138	Gray Sandstone	Hard
138	153.5	Gray Sandstone	
153.5	155	Gray Shale	Coal Bands
155	160.8	Coal Traces	Shale to 157
160.8	162	Gray Shale	
162	167	Gray Sandstone	Hard
167	177	Gray Shale	few thin coal bands
177	178	Coal	
178	180	Gray Sandstone	Hard
180	182	Gray Shale	
182	198	Gray Sandstone	
198	205.5	Coal	
205.5	206.5	Siltstone	
206.5	209	Shaly Coal	
209	210	Coal	Some Carbenaso Shale
210	210.5	Shale	
210.5	211	Siltstone	
211	216	Shale	Some Carb Shale
216	218.5	Siltstone	
218.5	219.5	Shale	
219.5	221	Siltstone	

*Revised by Gamma Ray-Neutron Log.*

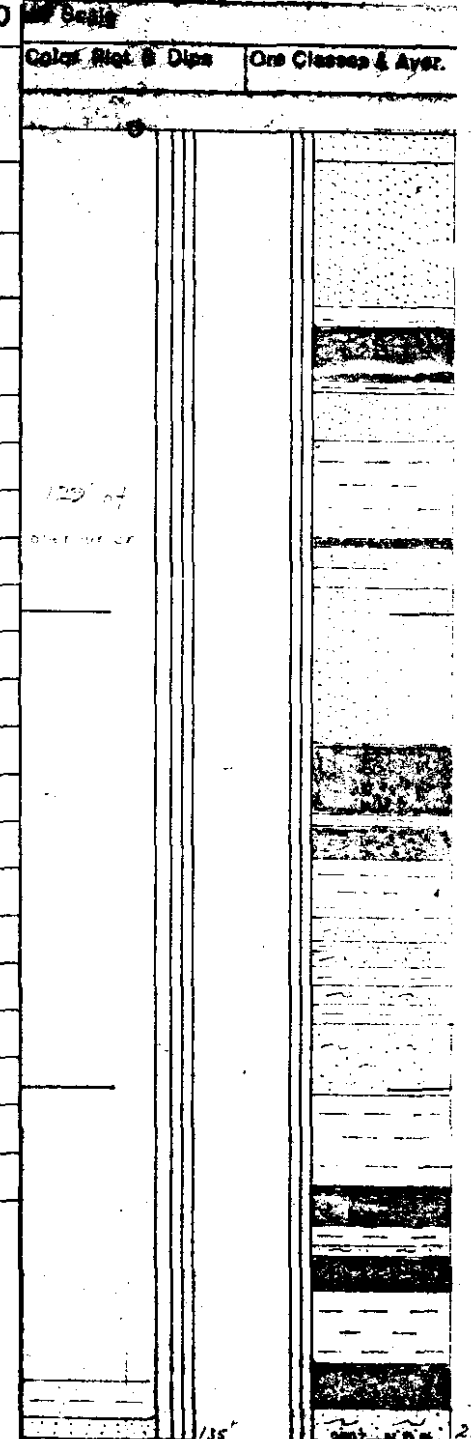
*153-156.5 poor coal*

*126.5-200.0 dirty coal, 203-206.0 same.*

Core Size 4 1/2"

Hole No. RH 201

Page 1



135'

270'

# Diamond Drill Geological Log



McAuley Drilling Co.

20

Objective:

Sampled:

Logged By: W.E. Pearson

Date: March 1970

Composites:

270'

Block: Sect.: Place: App. Bear: App. Dip.: Length:

From	To	Discard:	Reason:
221	223	Shale	
223	225	Siltstone	
225	227	Carb. Shale Trace of Coal	
227	234.5	Siltstone	
234.5	236.5	Carb. Shale	
236.5	237	Shale	
237	240	Carb. Shale Trace Coal	
240	242	Shale	239-241.0 Coal, poor quality.
242	243	Coal	
243	244	Siltstone	
244	248	Coal Trace Carb. Shale	
248	250	Carb. Shale	
250	251	Siltstone	
251	254.5	Coal Trace Carb. Shale	
254.5	262	Shale	No Significant Seams
262	266.5	Coal Trace Carb. Shale	
266.5	268	Siltstone	
268	270.5	Siltstone	
270.5	271.5	Shale	
271.5	275	Carb. Shale Trace Coal	
275	298	Gray Shale	
298	299.5	Coal	
299.5	311	Gray Shale	

Core Size 4 1/2"

Hole No. RH201

Page 2

Scale

Color Plot & Dips

Ore Classes & Aver.

425'

End

405

207-A.D.N.

# Diarnond Drill Geological Log



MaAuley Drilling Co.

Objective:

Sampled:

Logged By: **W.E. Pearson**

Date:

Composites:

Block:

Sect.:

Place:

App. Bear:

App.: Dip.:

Length:

From	To	Discard:	Reason:
------	----	----------	---------

311	330	Gray Sandstone	Hard
-----	-----	----------------	------

*on Radiation Log* { 320-331 Good Coal  
342-348 Good Coal

330	348	Gray Shale	Traces Coal
-----	-----	------------	-------------

348	352	Coal	
-----	-----	------	--

352	362	Gray Shale	few thin coal bands
-----	-----	------------	---------------------

362	373	Gray sandstone	Hard
-----	-----	----------------	------

373	392	Fine Sandstone	
-----	-----	----------------	--

392.5	414.5	Shale	Hard
-------	-------	-------	------

414.5	417	Sandstone	
-------	-----	-----------	--

417	420.5	Shale	
-----	-------	-------	--

420.5	425	Sandstone	
-------	-----	-----------	--

End Hole

Core Size

4 1/2"

Hole No.

RH201

Page

3

40 Scale

Color Plot & Dips

Ore Classes & Aver.



# Diamond Drill Geological Log



K-FORDING 70(3)A-2

Becker Drilling Co.

20

Objective:

Sampled:

Logged By: S.B. Butrenchuk Date: April, 1970

Composites:

312

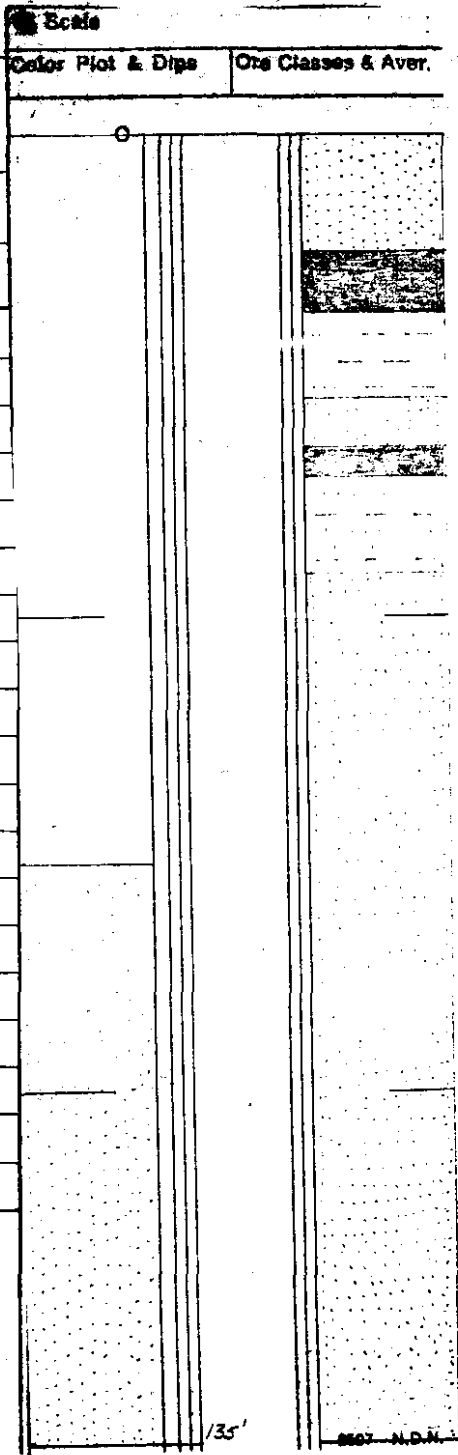
Block: Sect.: Place: App. Bear: App. Dip.: Length:

From To Discard: Reason: Turnbull

1	30	Overburden	
30	48	Rock and gravel	
48	75	Overburden	Revised by radiation log
75	90	Sandstone with coal stringers	
90	100	Sandstone	
100	147	Sandstone with coal stringers	
147	153	Coal	149.0 to 150.0
153	162	Shale	
162	167	Shattered Sandstone	
167	170	Coal	162.5 to 168.0
170	180	Sandstone and Shale	
180	205	Sandstone	
205	251	Sandstone - shattered layers	
251	280	Sandstone with coal stringers - shattered layers of sandstone.	
280	290	Sandstone - shattered	
290	305	Sandstone	
305	314	Coal	300.0 to 310.0
314	328	Shale - mixed with coal stringers	
328	349	Sandstone and Shale	
349	360	Shattered Sandstone	
360	380	Shale and Sandstone	
380	400	Shale - mixed with coal	
400	401	Sandstone	

Core Size 4-7/8"

Note No. R.H. 202 Page 1



# Diamond Drill Geological Log



Becker Drilling Co.

20

Scale

Objective:

Sampled:

Color Plot & Dips

Ore Classes & Aver.

Logged By: S.B. Butrenchuk

Date: April, 1970

Composites:

Block:

Sect.:

Place:

App. Bear:

App. Dip.:

Length:

Turnbull

From	To	Discard:	Reason:
401	404	Sandstone with coal stringers	
404	429	Coal	400.0 to 416.0
429	430	Shale	
430	431.5	Coal	418.5 to 423.0
431	460	Sandstone	
		460' End of hole.	

Core Size 4-7/8"

Hole No. R.H. 202

Page 2

405'

2507-N.D.N.

DIAMOND DRILL SAMPLING RECORD

TURNBULL

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
147	153	"Upper 7" Raw Coal Composite				0.5	23.2	19.6	56.7	7 $\frac{1}{2}$ , 7 $\frac{1}{2}$ , 8	0.44	
		Clean Coal Composite				0.4	9.3	22.3	68.0	8, 7 $\frac{1}{2}$ , 8	0.54	
404	432	"4" Raw Coal Composite				0.6	41.2	15.9	42.3	2, 2, 2 $\frac{1}{2}$	0.29	
		Clean Coal Composite				0.5	12.1	20.9	66.5	6 $\frac{1}{2}$ , 5 $\frac{1}{2}$ , 5 $\frac{1}{2}$	0.46	

# Diamond Drill Geological Log



K-FAROEING 70(3)A-2

Becker Drilling Co.

20

Objective:

Sampled:

312

Logged By: S.B. Butrenchuk

Date: April, 1970

Composites:

Block:

Sect.:

Place: Turnbull

App. Bear:

App. Dip.:

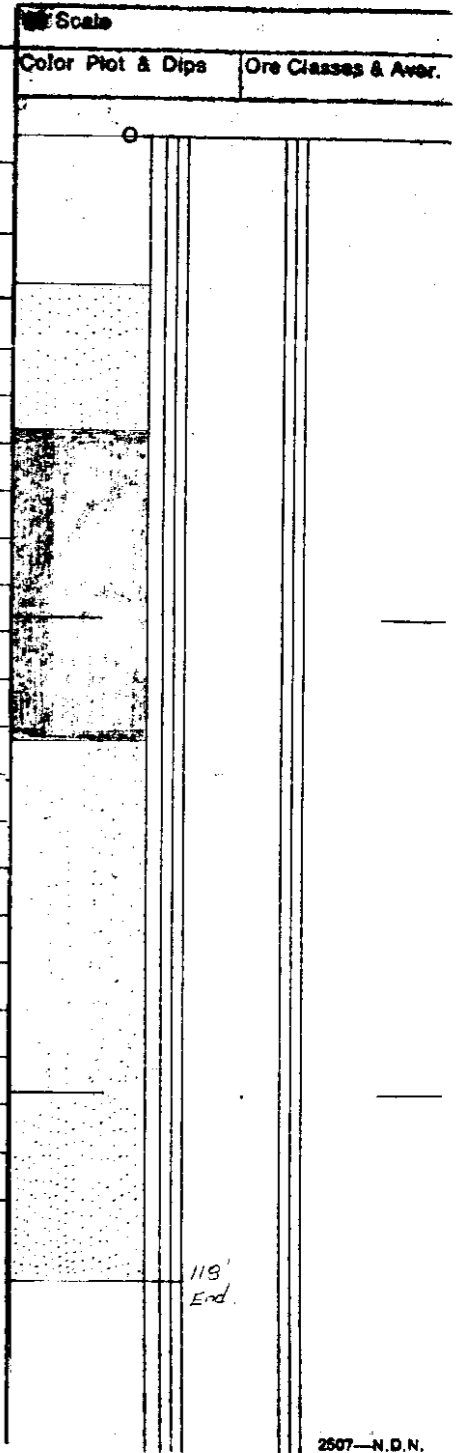
Length:

From	To	Discard:	Reason:
0	15	Overburden	
15	30	Sandstone - shale stringers	
30	62	Coal	Lean?
62	98	Sandstone	
98	114	Sandstone - coal stringers	
114	118	Sandstone	
		118' End of Hole	

Hole No. 203	Elev. 5709.0
Lat. 497,666.2	Dep. 76,850.2
Elev:	Th.
Top of 4	@ 5679   32'
Top of	@   '
Top of	@   '
Top of	@   '

Core Size  
4-7/8"

Hole No. R.H. 203 Page 1



118' End

### DIAMOND DRILL SAMPLING RECORD

TURNBULL

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
30	62	"4" Raw Coal Composite				0.3	20.3	20.0	59.4	5,5,5	0.77	
		Clean Coal Composite				0.2	8.5	20.7	70.5	7,7,7	0.55	

# Diamond Drill Geological Log



K - FROING 70(3)A-2

Becker Drilling Co.

Objective:

Sampled:

312

Logged By: W. E. Pearson

Date: April 1970

Composites:

Block:

Sect.:

Place:

App. Bear:

App.: Dip.:

Length:

From	To	Discard:	Reason:
0	135	Sandstone	
135	136	Coal	Coal 143.0 to 144.0
136	230	Sandstone	

Hole No. 204 Elev. 5702.1  
 Lat. 49° 30' 9" Dep. 76.902.5  
 Elev. Th.  
 Top of \_\_\_\_\_ @ \_\_\_\_\_  
 Top of \_\_\_\_\_ @ \_\_\_\_\_  
 Top of \_\_\_\_\_ @ \_\_\_\_\_  
 Top of \_\_\_\_\_ @ \_\_\_\_\_

Core Size

4 1/2"

Hole No.

RH 204

Page

1

40 Scale

Color Plot & Dips

Ore Classes & Aver.

# Diamond Drill Geological Log



Becker Drilling Co.

Objective:

Sampled:

Logged By: **W.E. Pearson**

Date: **May, 1970**

Composites: **Extension of Hole**

Block:

Sect.:

Place: **Turnbull**

App. Bear:

App.: Dip.:

Length:

From	To	Discard:	Reason:
------	----	----------	---------

230	279	Sandstone	
279	280	Shale	
280	283	Sandstone	
283	284	Shale	
284	286	Coal	
286	312	Shale	
312	353	Coal	
353	357	Shale coal stringers	
357	370	Sandstone	

End of Hole

Core Size **3 7/8**

Hole No. **RH 204**

Page **2**

Scale

Color Plot & Dip

Ore Classes & Avar.

# Diamond Drill Geological Log



K-FORGING 70(3)A-2

Becker Drilling Co.

Objective:

Sampled: 312

Logged By: W. E. Pearson

Date: April 1970

Composites:

Block: Sect.: Place: App. Bear: App. Dip.: Length:

From To Discard: Reason:

0	1	Overburden			
1	137	Sandstone			
137	147	Coal	139.0 to 147.0	5190 to 5192	Top part of #4 Seam
147	152	Shale			
152	162	Sandstone			
162	205	Coal	162.0 to 205.0	5193 to 5200	
205	225	Sandstone Hard			

End Hole

Hole No.	205	Elev.	5633.6
Lat.	49° 56' S	Dep.	70° 48' E
		Elev.	Th.
Top of	4	@	5497   43'
Top of		@	'
Top of		@	'
Top of		@	'

Core Size

Hole No.

RH 205

Page

1



**DIAMOND DRILL SAMPLING RECORD**

TURNBULL

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
137	147	"4 Upper" Raw Coal Composite				0.6	17.2	19.6	62.6	5½, 5.5	0.33	
138.5	149	Clean Coal Composite				0.6	10.4	23.0	65.9	7½, 7.7	0.36	
162	205	"4" Raw Coal Composite				0.5	34.4	17.8	47.3	2½, 2½, 2½	0.27	
		Clean Coal Composite				0.5	13.3	21.7	64.5	5½, 5.5	0.36	

# Diamond Drill Geological Log



1- FACING 70(3)A-2

Becker Drilling Co.

Objective:

Sampled:

312

Logged By: W.E. Pearson

Date: May 1970

Composites:

Block:

Sect.:

Place: Turnbull

App. Bear:

App. Dip.:

Length:

From To Discard: Reason:

0	25	Overburden		
25	30	Rocks layers clay		
30	66	Shale		
66	67	Coal	5247	
67	100	Shale sandstone layers		
100	207	Sandstone		
207	208	Black Shale		Revised by radiation log
208	214	Sandstone		
214	222	Black Shale		
222	251	Coal	} 5248 to 5254	Coal 223.0 to 264.0
251	253	Shale		
253	255	Coal		Parting 255.5 to 259.0
255	260	Shale coal stringers	5255 to 5256	
260	275	Sandstone		
		End hole		

Core Size 3 7/8

Hole No. RH 206

Page 1

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.

# Diamond Drill Geological Log



K-FROING 70(3)A-2

Becker Drilling Co.

Objective:

Sampled:

312

Logged By: W. E. Pearson

Date: May 1970

Composites:

Block:      Sect.:      Place:      App. Bear:      App.: Dip.:      Length:

From	To	Discard:	Reason:
0	3	Overburden	<i>Revised by radiation log</i>
3	10	Soft Sandstone	
10	166	Sandstone	
166	171	Shale	
171	211	Coal	<i>173.0 to 200.5'</i> 5257 to 5261
211	216	Shale	<i>parting 200' to 205'</i> 5262 to 5263
216	218	Coal	5264
218	219	Shale	5265
219	230	Sandstone	

End hole

Core Size

3 7/8

Hole No. RH 207

Page 1

# Diamond Drill Geological Log



K-FORING 70(3)A-2

Becker Drilling Co.

Objective:

Sampled:

312

Logged By: W. E. Pearson

Date: May, 1970

Composites:

Block:

Sect.:

Place: **Turnbull**

App. Bear:

App. Dip.:

Length:

From To

Discard:

Reason:

0	12	Overburden	
12	55	Sandstone	
55	82	Black Shale	
82	105	Sandstone - very hard	
105	106	Coal	106.0 to 107.5
106	107	Shale	
107	114	Sandstone	
114	120	Black Shale	
120	125	Shale	
125	127	Sandstone	
127	130	Shale	
130	140	Sandstone	
140	150	Coal	
150	300	Sandstone	

End Hole

Core Size

4 1/2

Hole No.

RH 208

Page 1

Color, Plot & Dip: Ore Classes & Assay.

300

# Diamond Drill Geological Log



K-FAROING 70(3)A-2

Becker Drilling Co.

Objective:

Sampled:

312

Logged By: **W.E. Pearson** Date: **May, 1970**

Composites: **Turnbull**

Block:

Sect.:

Place:

App. Bear:

App. Dip.:

Length:

From	To	Discard:	Reason:
0	20	Overburden	
20	37	Sandstone	traces of coal
37	38	Coal	
38	43	Shale	
43	45	Sandstone	
45	78	Coal	
78	80	Shale	
80	82	Coal	
82	85	Shale	
85	100	Sandstone	

End of hole

Core Size 4½

Hole No. RH 209

Page 1

# Diamond Drill Geological Log



K-FORING 70(S)A-2

Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

Logged By: **A.C.M. and D.M.** Date: **June, 1970** Composites: \_\_\_\_\_

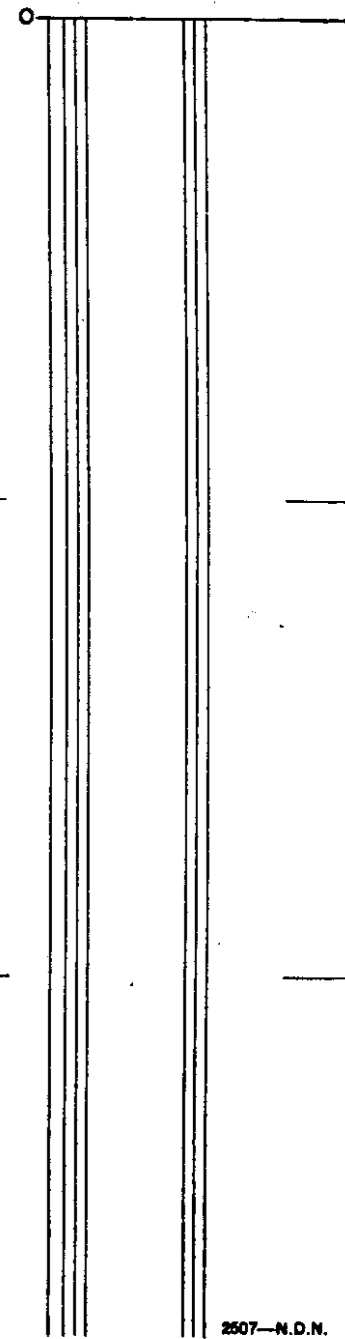
Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App. Dip: \_\_\_\_\_ Length: \_\_\_\_\_

**312**

40 Scale

Color Plot & Dips    Ore Classes & Aver.

From	To	Discard:	Reason:
0	16	Overburden.	
16	19	2 1/2' fine sandstone passing into dark shale, 3" rusty band at 19 feet.	
19	28	Coal - No. 12 seam oxidized?	14.0 to 25.0
28	48	Dark carbonaceous mud stone, occasional narrow vitrain bands, 70° to Core Axis. 38 to 48 simply uniform mudstone, no coal bands, several rusty fractures.	
48	52	Transition from mudstone to fine sandstone. The two rock types are intimately interbedded, strong current evidence.	
52	76	Coarse grained sandstone with many narrow vitrain bands whose attitudes indicate current bedding.	
76	129	Predominantly dark fine bedded mudstone intop 10 feet are two narrow vitrain bands, otherwise this unit is barren. Central protion of unit grades upto intimate siltstone-mudstone horizon in which load casts, other flow structures and current bedding are evident. Lower section of unit is gain dark mudstone with one vitrain band. Overall dip 70 degrees to Core Axis.	
129	148.6	15 feet recovered coal - Seam No. 11. 129 to 132 feet bone coal. 139.5 to 141 feet hone coal, shaley admixture. 143 to 143.8 feet slickensided bone coal.	126.0 to 146.0
148.6	158.3	Alternating siltstone, sandy siltstone, dark mudstone. Occasional vitrain bands 60° to Core Axis. Nine feet recovered.	
158.3	221.3	Dark mudstone, sandy siltstone, siltstone alternating cross-bedding 63 feet recovered.	
221.3	263	Mudstone and siltstone interlayered. 223-225.5 good coal. Overall dip 60° to core axis.	
263	306	Sandy siltstone. Grading into very carbonaceous mudstone. 65° to core axis.	302.0 to 320.0
306	332.5	Coal. 323-324.7 feet - dark mudstone band. 326.1 to 329.1 dark mudstone. 329.1 to 332.5 good coal for first two feet blending with mud to final mudstone contact at 332.5 feet.	
332.5	346.5	Dark mudstone, sand laminae, grading through siltstone back to mudstone.	Core Size
346.5	351.8	Coal, banded 100% recovery.	HQ
351.8	400	Dark carbonaceous mudstone grading to a siltstone. Vitrain lenses.	Hole No.
400	433	Sandstone medium grain - 0.04 to 0.06". Dip 20 degrees.	300
			Page
			1

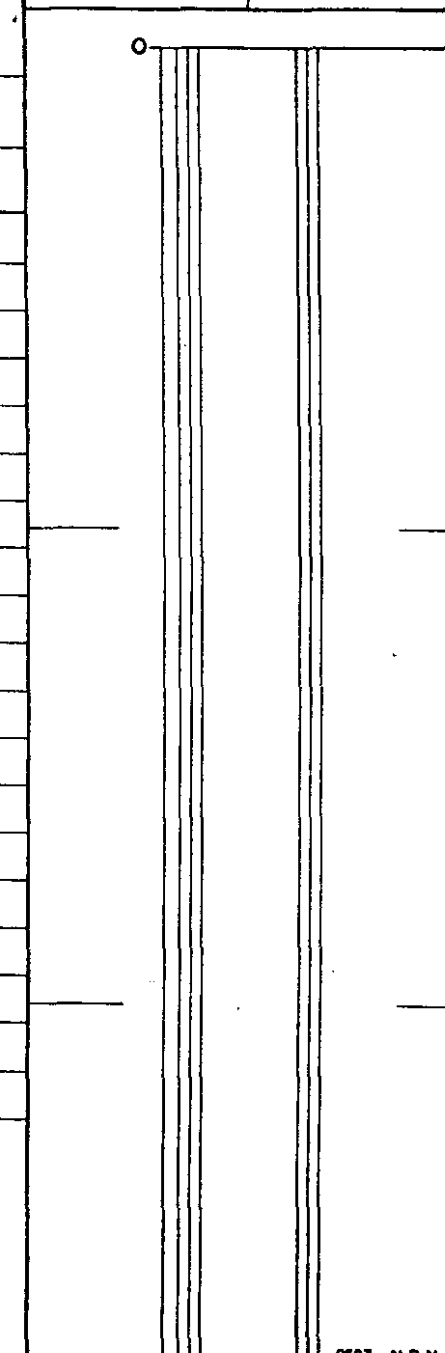


# Diamond Drill Geological Log



Objective:		Sampled:			
Logged By:		Date:		Composites:	
Block:	Sect.:	Place:	App. Bear:	App. Dip.:	Length:
1	To	Discard:	Reason:		
	479		Sandstone grading to sandy siltstone, mudstone laminae, few vitrain layers.		
	514		Siltstone grading to mudstone. Pyrites replacing vitrain lenses.		
	527		Siltstone cross laminae of mudstone and very fine sandstone.		
	533		Silty mudstone. Fault - closely spaced brecciated zones, two feet and three feet.		
	566		Mudstone, silty, cross laminated.		
	588.4		Dark mudstone grades to a cross laminated sandy siltstone.		
4	612.7		Good coal. 593.6 to 595 feet dark shale parting. <i>586.0 to 609.0 parting 589.0 to 592.0</i>		
7	640		Mudstone, shaley grading to fine sandstone.		
	643.5		Fine sandstone.		
5	656		Shaley mudstone with vitrain bands.		
	682.6		Good coal, 100% recovery. 661.4 to 662.1 shale. <i>653.0 to 678.0</i>		
6	689.8		Very fine sandstone and siltstone.		
8	692		Siltstone and fine sandstone grading down to mudstone.		
	697		Mudstone, 3" bone coal.		
	700		Siltstone and fine sandstone.		
	702		Sandstone interbedded with mudstone.		
	706		Fissile mudstone with vitrain bands.		
	706.8		Sandstone, fine grain thin bedded.		
8	711.5		Siltstone, vitrain band.		
5	714.7		Fine sandstone, siltstone and mudstone. 70 degrees to core axis.		
7	718.4		Mudstone, massive.		
4	721		Siltstone, FAULT.		
	723		Siltstone.		

40 Scale
Color Plot & Dips
Ore Classes & Aver.



Aver.

Core Size	HQ
Hole No.	300
Page	2

# Diamond Drill Geological Log



Objective:

Sampled:

Logged By:

Date:

Composites:

Block:

Sect.:

Place:

App. Bear:

App.: Dip.:

Length:

From	To	Discard:	Reason:
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888.3	891.1	Medium sandstone.	
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891.1	891.8	Siltstone.	
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891.8	897.7	Siltstone with bioturbation.	
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897.7	899.9	Medium sandstone.	
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899.9	901	Siltstone.	
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901	902.4	Medium sandstone, vitrain lenses.	
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902.4	916	Siltstone.	
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916	946	Coal recovery = 21 feet, or 67%.	910.0 to 938.0 parting 930.0 to 933.5
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946	958	Siltstone, carbonaceous with vitrain lenses.	
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		End of hole.	
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Core Size

HQ

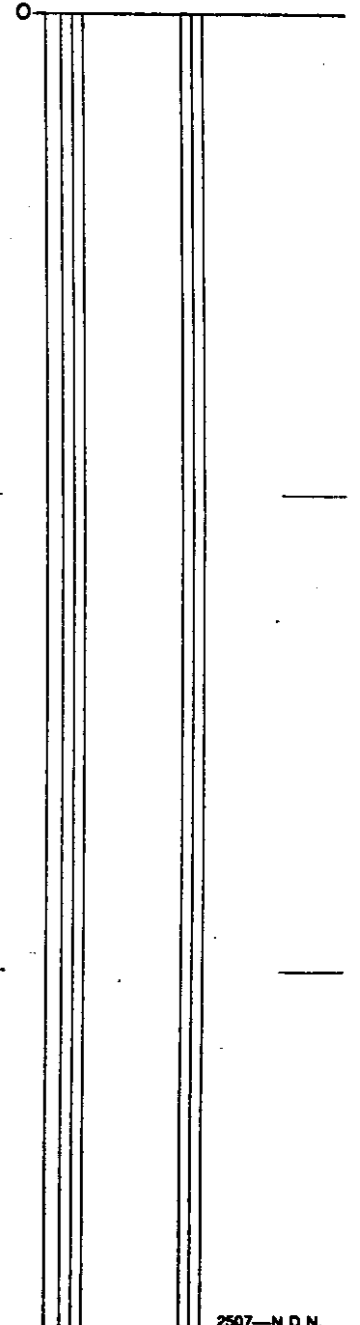
Hole No.

300

Page

4

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.





# Diamond Drill Geological Log



40 Scale

Objective:

Sampled:

Color Plot & Dips

Ore Classes & Aver.

Logged By: \_\_\_\_\_ Date: \_\_\_\_\_

Composites:

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From \_\_\_\_\_ To \_\_\_\_\_ Discard: \_\_\_\_\_ Reason: \_\_\_\_\_

SUMMARY - D.D.H. 300 DEPTH - 958 feet.

19	28	Seam No. 12	100% Recovery
129	148.6	Seam No. 11	83% Recovery
223	225.5	Seam No. 10	100% Recovery
306	332.5	Seam No. 9	70% Recovery
346	351.8	Seam No. 8	100% Recovery
588.4	614	Seam No. 7	95% Recovery
656	682.6	Seam No. 5	87% Recovery
916	946	Seam No. 4	70% Recovery

Hole No. 300 Elev. 6,273.4

Lat. 49° 57' 3.5" Dep. 80° 16' 7.2"

Elev. Th

Top of 4 @ 5,957.4 | 30.0

Top of 5 @ 6,217.4 | 26.0

Top of 7 @ 6,225.0 | 25.0

Top of 8 @ 6,527.4 | 57.8

Top of 9 @ 6,567.4 | 20.5

Top of 10 @ 6,650.4 | 2.5

Top of 11 @ 6,744.4 | 19.6

Top of 1 1/2" @ 6,854.4 | 9.0

Core Size

Hole No.

300

Page

5

**FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD**

FROM	TO	DESCRIPTION		SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
19.0	28.0	Seam "Upper 11"	RAW COAL					1.7	16.0	24.0	58.3	1½ 1½ 1½	0.66	
			CLEAN COAL					1.5	8.0	25.3	65.2	2½ 2½ 2½	0.69	69.2 % Clean Coal Recovery
129.0	148.6	Seam "11"	RAW COAL					0.5	25.5	22.8	51.2	7.7, 7½	0.69	
			CLEAN COAL					0.6	9.6	25.8	64.0	7½ 7½ 7½	0.75	61.4 % Clean Coal Recovery
306.0	326.1	Seam "9"	RAW COAL					0.7	24.5	21.1	53.7	5½ 5½ 5½	0.44	
			CLEAN COAL					0.9	6.8	23.4	68.8	7, 6½, 7	0.51	67.9 % Clean Coal Recovery
346.5	351.8	Seam "8"	RAW COAL					0.5	14.0	21.6	63.9	6½ 6½ 7	0.60	
			CLEAN COAL					0.5	10.1	23.6	65.7	7½ 7½ 7½	0.73	63.3 % Clean Coal Recovery
588.4	614.0	Seam "7"	RAW COAL					0.5	19.4	21.8	58.3	6, 6, 6½	0.36	
			CLEAN COAL					0.6	9.1	18.8	71.5	7, 7, 7	0.44	79.1 % Clean Coal Recovery
656.0	682.6	Seam "5"	RAW COAL					0.6	18.9	20.5	60.0	3, 3, 3	0.33	
			CLEAN COAL					0.5	9.7	22.1	67.7	3½ 3½ 3½	0.38	77.5 % Clean Coal Recovery
916.0	946.0	Seam "4"	RAW COAL					0.4	17.0	21.6	61.0	4½, 4½, 4	0.33	
			CLEAN COAL					0.8	6.8	22.2	70.2	7, 7, 7	0.36	86.4 % Clean Coal Rec.

# Diamond Drill Geological Log



K- FORTING 70/31A-2

Objective:

Sampled:

312

Logged By: D.G.M.

Date: June, 1970

Composites:

Block:

Sect.:

Place: *Clode Creek*

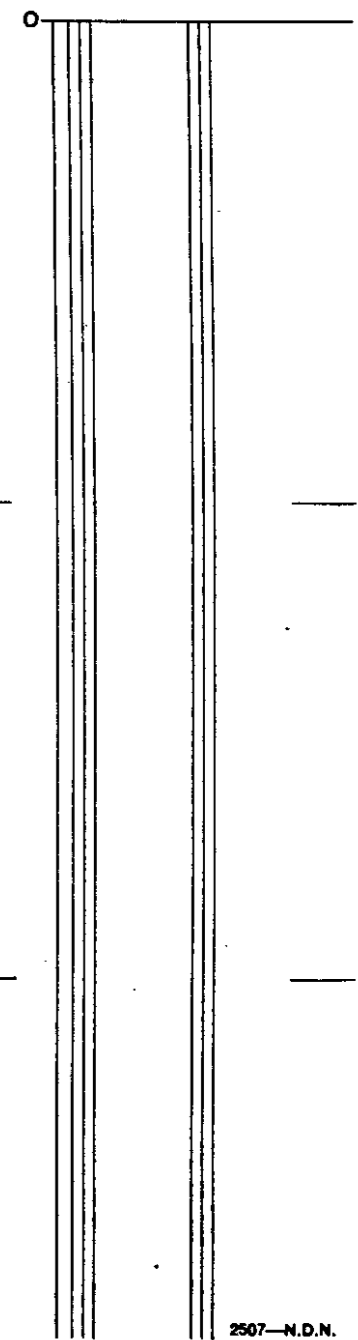
App. Bear:

App. Dip.:

Length:

From	To	Discard:	Reason:
0	12	No core - overburden.	
12	14	Sandstone, cross laminae, mudstone laminae, very fine grain.	
14	19	Breccia.	
19	21.7	Siltstone with sandstone laminae.	
21.7	33.6	Breccia.	
33.6	38	Shale, carbonaceous, thin lenses of vitrain and bone coal.	
38	39	Coal, vitrain, clarain.	
39	39.5	Shale.	<i>Revised by radiation log</i>
39.5	40	Coal.	
40	41	Shale.	
41	42	Coal.	
42	43	Shale.	
43	50	Sandstone, silty laminae, very fine grain.	
50	50.4	Siltstone, sand laminae.	
50.4	56.7	Sandstone, fine to medium grain, laminae and cross laminae.	
56.7	63.5	Siltstone, laminae of sand.	
63.5	64.5	Sandstone, cross laminae.	
64.5	65	Mudstone, sand laminae.	
65	66	Sandstone, cross laminae.	
66	67.2	Mudstone, sand laminae and cross laminae, bioturbation.	
67.2	68.0	Sandstone, laminae, current ripples.	
68	110.4	Mudstone, sand laminae, flame structure, cross laminae, load cast, 10% sand.	
110.4	115.3	Sandstone, fine grain, laminae, cross laminae.	

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



Core Size  
HQ  
Hole No.  
301

Page  
1

# Diamond Drill Geological Log



Objective:

Sampled:

Logged By:

Date:

Composites:

Block:

Sect.:

Place:

App. Bear:

App. Dip.:

Length:

From

To

Discard:

Reason:

115.3 119.8 Mudstone, fine sand laminae ± 10% bioturbation. Shale, 35% sand, fissile.

119.8 120.5 Carbonaceous shale.

120.5 122.7 Coal, clarain and durain. Short 1 foot.

122.7 122.9 Shale.

122.9 141.0 Coal, clarain and durain. Short 3.8 feet.

141.0 141.5 Shale.

141.5 144.8 Coal, clarain and durain.

Recovery 100%.

144.8 145.4 Shale.

145.4 148.2 Coal, clarain and durain.

Recovery 100%.

148.2 151.3 Shale, vitrain lenses.

151.3 152.3 Siltstone.

152.3 156 Sandstone, fine grain, laminae, lodecast.

156 159.3 Mudstone, clarain and durain.

Coal 156.0 - 161.0

Recovery 100%.

159.3 163.2 Coal.

163.2 175 Mudstone, 3% sand.

175 177.6 Sandstone, fine to medium grain, laminae.

177.6 183 Mudstone.

183 189.5 Sandstone, laminae and cross laminae of sand and mudstone, 30% mudstone laminae.

189.5 194 Mudstone, 30% sandy laminae and cross laminae.

194 196.4 Sandstone, 20% mudstone laminae, cross laminae of sand, mudclast.

Core Size

196.4 201.4 Mudstone, 4% sand laminae.

201.4 207.7 Mudstone.

207.7 209.7 Sandstone, fine grain, cross laminated, laminae of mudstone, convolute bed,

Hole No.

Page

penetemporaneous folding.

301

2

40 Scale

Color Plot & Dips

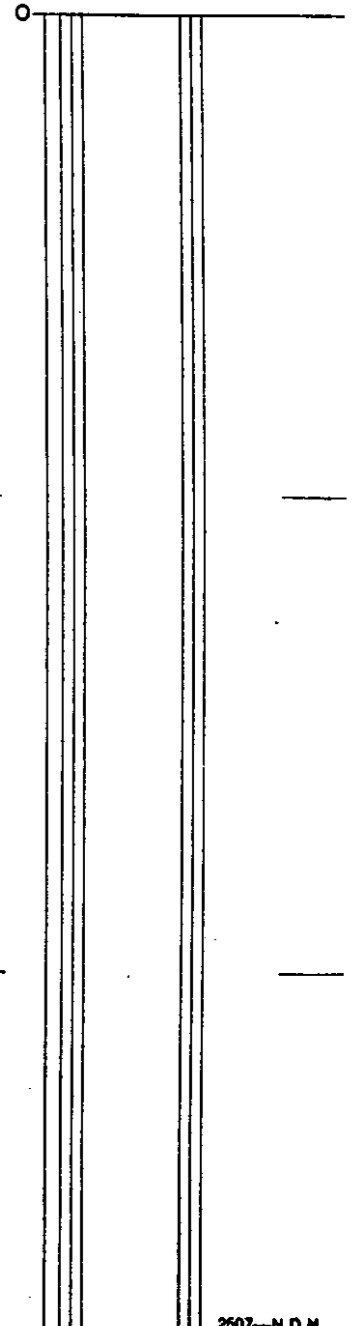
Ore Classes & Aver.

# Diamond Drill Geological Log



40 Scale

Objective:		Sampled:		Color Plot & Dips		Ore Classes & Aver.	
Logged By:		Date:		Composites:			
Block:	Sect.:	Place:	App. Bear:	App. Dip.:	Length:		
From	To	Discard:	Reason:				
209.7	222.1	Siltstone, 5% sand.					
222.1	222.6	Sandstone, medium grainy, fractured, laminated and cross laminated.					
222.6	223.1	Mudstone.					
223.1	223.5	Sandstone, medium grain, laminae, peneterporaneous faulting, small scale, fracture filled with calcite.					
223.5	236	Mudstone, sand laminae, 3% sand.					
236	241	Sandstone, medium to coarse grain, laminae.					
241	246	Sandstone, medium grain, laminated, cross laminae, mudclast, (channel bottom) laminae of mudstone and sandstone, Top 1.5 feet.					
246	275.6	Sandstone, medium to coarse grain, few mudclast, cross laminae. Vitrain lenses, fractured from 250 to 262 feet.					
275.6	289.3	Sandstone, massive, coarse grain, angular fragments.					
289.3	297.8	Sandstone, medium grainy, cross laminae, <2% mudstone.					
297.8	331.7	Mudstone, shaley, contact with sandstone. 70 degrees to core axis.					
331.7	398.1	Mudstone, 25% sand, thin beds of sand, 0.1' thick few vitrain bands.		Coal 394.0 - 400.0			
398.1	403.7	Coal, vitrain, clarain and little durain.					
403.7	407.4	Mudstone, shaley.		404.0 - 426.0			
407.4	430	Coal, vitrain, clarain and some durain. 1.4' short, recovery 93.8%.					
430	435.5	Shale, carbonaceous with small vitrain and durain band.					
435.5	454.2	Mudstone, 30% sand, occasional vitrain band up to .3' thick, sandstone beds up to .2' thick. Broken, pyrite replacing vitrain and durain bands.					
454.2	456	Sandstone, medium grain, cross laminated.		Core Size			
456	466.5	Mudstone, very carbonaceous, with small vitrain bands.		462.0 - 486.0			
466.5	490.1	Coal, clarain, fusain, some vitrain, short 4.35', 91.5% recovery.		Hole No.			
490.1	506.5	Mudstone, 30° to core axis, appears to be a fold.		503.0 - 506.0			
				301		Page	
						3	



# Diamond Drill Geological Log



Objective:		Sampled:		40 Scale	
Logged By:		Date:		Composites:	
Block:	Sect.:	Place:	App. Bear:	App. Dip.:	Length:
From	To	Discard:	Reason:		
506.5	509	Coal, durain and fusain.			
509	518	Sandstone, fine grain, laminae.			
518	542	Mudstone, 10% sand, vitrain bands, 1' short.			
542	545.2	Sandstone, fine grain, cross laminae.			
545.2	550	Mudstone.	<i>Coal 547.0 - 590.0</i>		
550	595	Coal, clarain and vitrain. Short .70 + 3.35'. Recovery - 90.2%.	<i>594.0 - 598.0</i>		
595	598.8	Mudstone, fissile.			
598.8	600.5	Coal, clarain and vitrain. Recovery - 100%.			
600.5	608.0	Mudstone.	<i>Coal 507.0 - 612.5</i>		
608.0	610.6	Sandstone, medium grain, thinly bedded.			
610.6	611	Mudstone.			
611	612.6	Coal, clarain. Recovery 100%.			
612.6	613	Mudstone.			
613	616	Siltstone.			
616	625.3	Sandstone, fine to medium grain, thinly bedded, cross laminae, bedding to core axis is 68°, dipping 22°, large mudclast at base of sandstone.			
625.3	628.9	Mudstone.			
628.9	629.5	Sandstone, medium grain, one bed.			
629.5	640.0	Mudstone, 6% sand, sand laminae, cross laminated.			
640	665	Sandstone, fine to medium grain, alternating, cross laminae and small mudclast near bottom of hole - 660'.			

Core Size	
Hole No.	Page
301	4

# Diamond Drill Geological Log



Objective:

Sampled:

Logged By:

Date:

Composites:

Block:

Sect.:

Place:

App. Bear:

App. Dip.:

Length:

From To Discard Reason:

665 708 Sandstone, coarse grain, crossbedded, some fracturing and brecciation, dip 30°.

708 708.5 Coal. *Coal 704.5 - 707.5*

708.5 709.5 Very carbonaceous sandstone.

709.5 726 Sandstone, coarse grain, some fracturing and brecciation 725 to 726.

726 736.5 Sandstone, medium grain, 15% mudstone, bedding 35 degrees.

736.5 739 Siltstone.

739 742.5 Sandstone, fine grain.

742.5 767.5 Siltstone, 15% fine sand in 0.5' beds.

767.5 768.5 Sandstone, fine grain, 50% mudstone laminae, lodocast. *Coal 766.0 - 776.0*

768.5 770.7 Mudstone. *parting 770.5 - 773.0*

770.7 775 Coal (773.8 to 774.0 mudstone parting), clarain, vitrain.

775 778.1 Mudstone.

778.1 779.8 Coal, poor recovery - no sample.

779.8 784 Mudstone.

784 791 Sandstone, very fine grain, laminae and cross laminae of sand and mudstone.

791 792.7 Siltstone.

792.7 795.8 Mudstone, very carbonaceous.

795.8 799 Sandstone, very fine grain, 45% mudstone laminae and cross laminae.

799 807 Mudstone.

807 808 Sandstone, very fine grain, mudclasts.

808 809.6 Mudstone.

809.6 814.5 Sandstone, very fine grain, 40% mudstone laminae, lodocast.

814.5 818.9 Mudstone, 20% sand.

Core Size

HQ

Hole No.

301

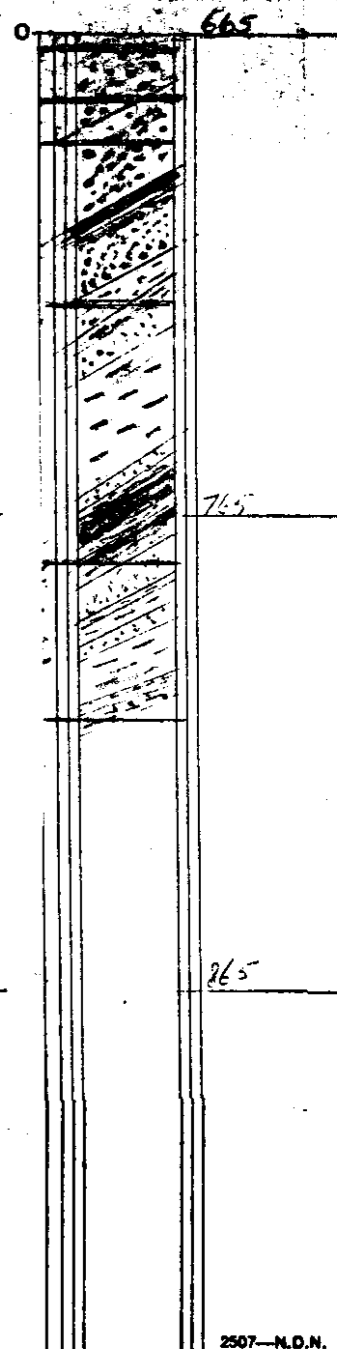
Page

5

40 Scale

Color Plot & Dips

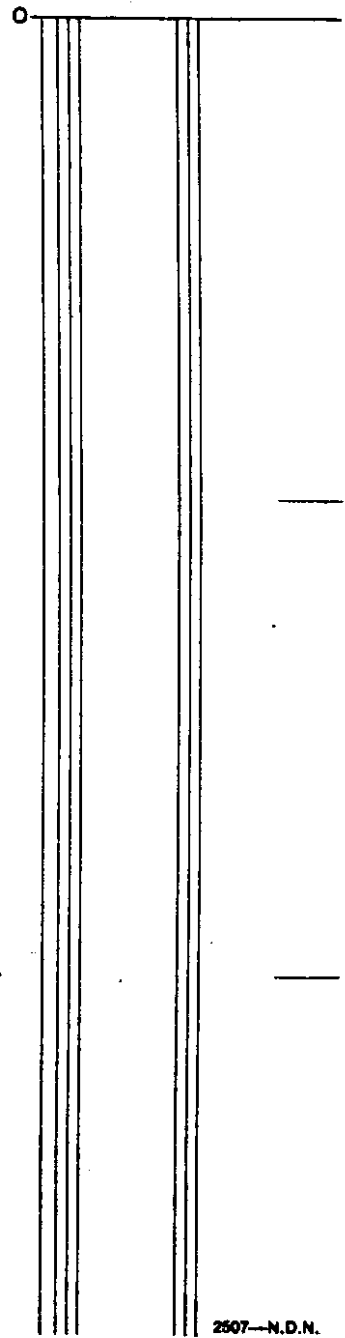
Core Classes & Aver.



# Diamond Drill Geological Log



Objective:		Sampled:		40 Scale	
Logged By: D.M.		Date:		Color Plot & Dips	
Composites:		Ore Classes & Aver.			
Block:	Sect.:	Place:	App. Bear:	App. Dip.:	Length:
From	To	Discard:	Reason:		
818.9	821.3		Sandstone, fine grain, laminae and cross laminae of sand, 35% mudstone laminae.		
821.3	823.0		Mudstone, 30% sand.		
823.8	841.5		Interbedded mudstone and fine grain sandstone, laminae, cross laminae and lodecast, bioturbation, burrow cast.		
			Dip 32 degrees. <i>Coal 838.0 - 856.0</i>		
841.5	842.5		Coal, vitrain, clarain and durain.		
842.5	842.8		Shale.		
842.8	860.1		Coal, clarain and durain.		
860.1	877.3		Mudstone, carbonaceous near bottom of seam containing vitrain and clarain bands up to 0.2 feet.		
877.3	886		Sandstone, very fine grain, argillaceous, beds massive, few current structures near bottom of unit, cross laminae, lodecast.		
886	891.9		Mudstone, some fracturing and brecciation, slickensides. <i>Coal 888.0 - 897.0</i>		
891.9	912.6		Coal, vitrain, clarain, durain.		
912.6	916.2		Mudstone.		
916.2	918.1		Coal, vitrain and clarain.		
918.1	922.3		Mudstone, vitrain band 0.4 feet.		
922.3	928.4		Siltstone, sandy - 30 percent.		
922.3	936		Mudstone.		
936	941		Sandstone, fine grained, 25% mudstone, mudclast, cross laminae, lodecast.		
941	943.7		Mudstone.		
943.7	1032		Sandstone, medium grain, thinly bedded, dip 14°, cross bedded, containing coalified wood fragments or roots? Bottom 5 feet brecciated, massive bed 1021 1026.		
1032	1056.5		Mudstone, top 10 feet fractured and brecciated.		



Core Size

HQ

Hole No.

301

Page

6



# Diamond Drill Geological Log



Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

Logged By: D. M. Date: \_\_\_\_\_ Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From To Discard: Reason:

1056.5	1059		Sandstone, very fine grain, laminae and cross laminae.
1059	1082.7		Mudstone.
1082.7	1084		Sandstone, fine grain, laminae and cross laminae, 25% mudstone.
1084	1086.5		Mudstone.
1086.5	1094.9		Sandstone, fine grain, flaser structure, laminae and cross laminae of sandstone and mudstone.
1094.9	1102		Mudstone.
1102	1106		Sandstone, fine to very fine grain, laminae and cross laminae, mudstone content 25%, mudclast, flaser structure, calcite fracture filling.

Core Size  
 HQ  
 Hole No. 301  
 Page 7

40 Scale  
 Color Plot & Dips  
 Ore Classes & Aver.

# Diamond Drill Geological Log



40 Scale  
Color Plot & Dips    Ore Classes & Aver.

Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

Logged By: \_\_\_\_\_ Date: \_\_\_\_\_ Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App.: Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

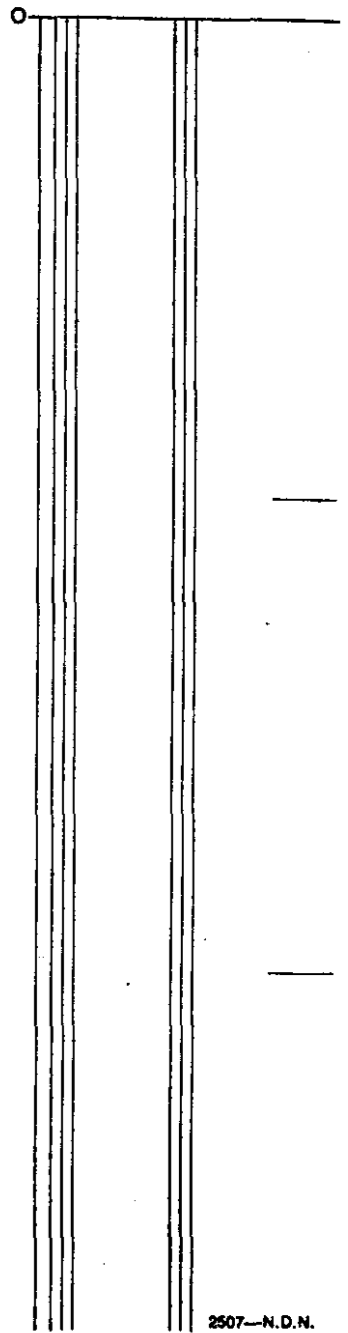
From    To    Discard:    Reason:

		SUMMARY - D.D.H. 301    DEPTH - 1,106 feet.	
120.5	148.2	Seam No. 9	83% Recovery
159.3	162.2	Seam No. 8	100% Recovery
398.1	403.7	Upper Seam No. 7	100% Recovery
407.4	430	Lower Seam No. 7	93.8% Recovery
466.5	490.1	Seam No. 5	82% Recovery
550	<del>572</del> 505.0	Repeat No. 5	82% Recovery

Hole No.	301	Elev.	6,409.3
Lat.	495,798.3	Dep.	80,359.1
		Elev.	Th.
Top of	4	@	6,250.5   27.7
Top of	5	@	6,250.0   33.9
Top of	7	@	6,111.2   50.6
Top of	7	@	6,001.9   22.6

Top of 6 @ 5,949.8 27.5  
Top of (REPEAT) 5 @ 5,859.3 45.6

Core Size \_\_\_\_\_  
Hole No. 301    Page 8



FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
120.5	148.2	Seam "9" RAW COAL					0.6	28.2	20.6	50.6	3,3,3	0.52	
		CLEAN COAL					1.1	8.3	24.5	66.1	5½, 5½, 5½	0.55	68.5 % Clean Coal Recovery
159.3	163.4	Seam "8" RAW COAL					0.6	32.1	19.4	47.9	1½, 1½, 1½	0.55	
		CLEAN COAL					0.8	9.8	22.8	66.5	4½, 4½, 5	0.75	62.4 % Clean Coal Recovery
398.1	403.7	Seam "Upper 7" RAW COAL					0.4	33.4	20.2	46.0	5, 5½, 5	0.52	
		CLEAN COAL					0.7	9.5	25.2	64.6	7½, 7½, 7½	0.64	55.2 % Clean Coal Recovery
407.4	430.0	Seam "7" RAW COAL					0.4	16.9	24.2	58.5	7, 6½, 7	0.38	
		CLEAN COAL					0.5	9.0	24.6	65.9	7½, 7½, 7½	0.44	80.6 % Clean Coal Recovery
466.5	490.1	Seam "5" RAW COAL <i>✓ A.C.</i>					0.5	16.2	22.0	61.3	4, 4, 4½	0.33	
		CLEAN COAL					0.3	9.7	22.6	66.9	4, 3½, 3½	0.36	78.1 % Clean Coal Recovery
550.0	592.0	Seam "5" RAW COAL <i>✓ A.C.</i>					0.5	16.2	22.0	61.3	4, 4½, 4	0.33	
		CLEAN COAL					0.6	8.4	22.0	69.1	5, 5, 5½	0.38	83.6 % Clean Coal Recovery
592.0	595.0	Seam "Lower 5" RAW COAL					0.5	27.0	24.0	48.5	2, 2, 2	0.30	
		CLEAN COAL					0.5	12.4	21.7	65.5	6, 6, 6	0.63	54.6 % Clean Coal Recovery

FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION		SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
611.0	617.5	Seam "Individual"	RAW COAL					0.4	26.5	20.5	52.6	6.6 $\frac{1}{2}$ , 6 $\frac{1}{2}$	0.47	
			CLEAN COAL					0.5	12.4	22.9	64.2	7.6 $\frac{1}{2}$ , 6 $\frac{1}{2}$	0.60	76.7 % Clean Coal Recovery
770.7	775.0	Seam "Minor"	RAW COAL					0.5	21.4	20.1	58.0	7 $\frac{1}{2}$ , 7 $\frac{1}{2}$ , 7	0.75	
			CLEAN COAL					0.5	12.3	26.7	63.5	7 $\frac{1}{2}$ , 7 $\frac{1}{2}$ , 8	0.83	75.5 % Clean Coal Recovery
841.5	860.1	Seam "Unknown"	RAW COAL					0.4	21.4	20.7	57.5	3 $\frac{1}{2}$ , 3, 3 $\frac{1}{2}$	0.41	
			CLEAN COAL					0.5	8.6	22.1	68.8	3.7 $\frac{1}{2}$ , 7 $\frac{1}{2}$	0.47	66.7 % Clean Coal Recovery
891.9	912.6	Seam "Unknown"	RAW COAL					0.6	26.9	18.6	53.9	3 $\frac{1}{2}$ , 4, 3 $\frac{1}{2}$	0.38	
			CLEAN COAL					0.6	8.7	22.3	68.4	7.6 $\frac{1}{2}$ , 7	0.47	59.8 % Clean Coal Recovery

# Diamond Drill Geological Log



K - FOREING 70(3)A-2

Objective:

Sampled: **312**

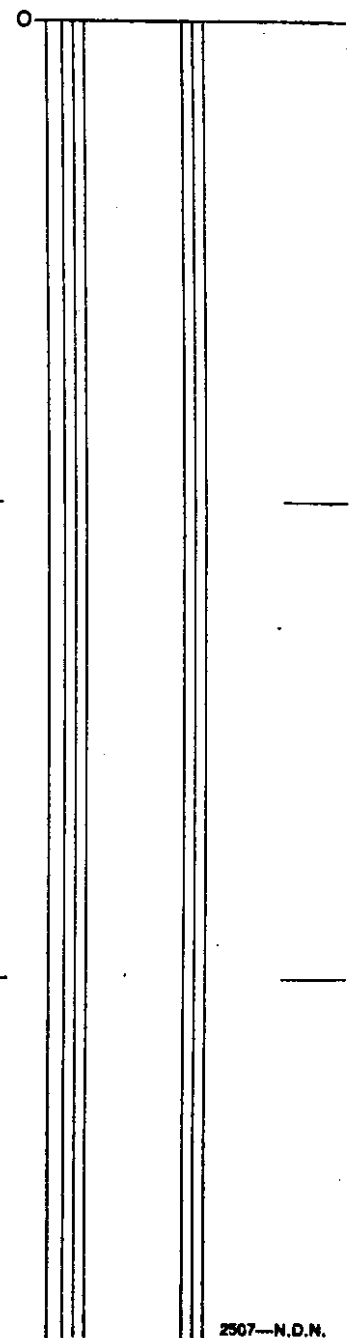
Logged By: D.G.M. and A.C.M. Date: June, 1970

Composites:

Block: Sect.: Place: *Chode creek* App. Bear: App.: Dip.: Length:

From	To	Discard:	Reason:
0	80	Breccia - mudstone.	<i>Revised by radiation log</i>
80	85.4	Coal - 3' lost by tricone rotary drilling.	
85.4	88.1	Mudstone, shaley.	
88.1	90.4	Sandstone, fine grained, thin bedded to laminated, penetemporaneous faulting, convolute bedding, small mudclast.	
		10% mudstone.	
90.4	96	Siltstone, sandy; 30% sand, 30% mudstone.	
96	99	Sandstone, very fine grain, 20% silt, calcite filling fractures.	
99	103.6	Mudstone.	
103.6	125.4	Fine grain sandstone and mudstone, interbedded, 45% mudstone; convolute laminae, cross laminae, mudclast, little bioturbation; some penetemporaneous faulting.	
125.4	153.3	Mudstone, bioturbation, fresh water clam.	
153.3	170.8	Coal, clarain-durain, some vitrain.	<i>Coal 164.0 - 180.0</i>
170.8	171.5	Mudstone, carbonaceous, shaley.	
171.5	174.3	Coal, vitrain, clarain.	
174.3	174.5	Shale, carbonaceous.	
174.5	178.0	Coal, clarain, durain.	
178.0	185.1	Mudstone, sandy and 20% sands.	
185.1	188.6	Sandstone, very fine grain, 22% mudstone interbedded.	
188.6	191.4	Mudstone.	
191.4	195.8	Coal, mostly clarain, some durain and vitrain.	
195.8	200	Mudstone, 8% very fine sand. Few vitrain bands.	
200	217	Dark mudstone, siltstone with vitrain bands at 201.5' to 202'. <sup>A</sup> 6" vitrain band.	
217	256.5	Siltstone grading into light grey, medium grained sandstone flow structures and current bedding throughout unit. 70° to core axis.	

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



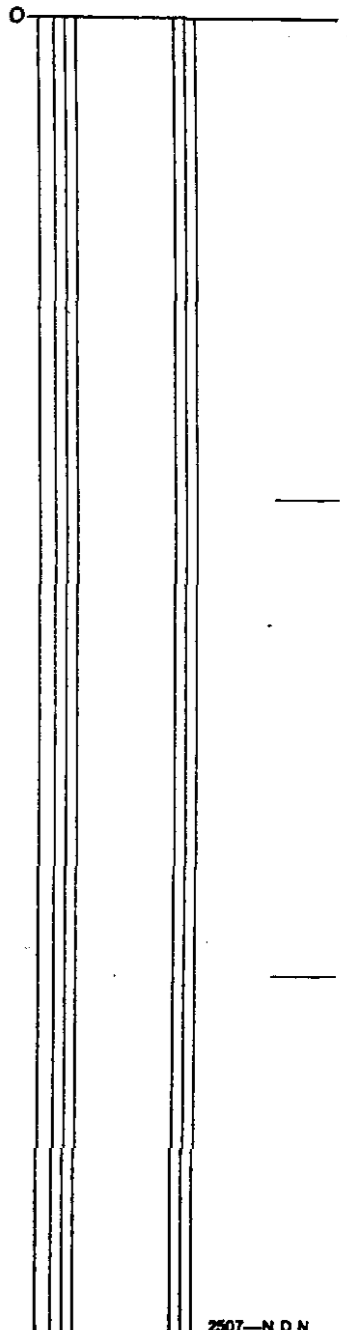
Core Size  
HQ  
Hole No. 302  
Page 1

# Diamond Drill Geological Log



Objective:		Sampled:	
Logged By:		Date:	
Block:		Composites:	
Sect.:	Place:	App. Bear:	App. Dip.:
Length:			
From	To	Discard:	Reason:
256.5	297.3		Coarse grained hard sandstone with numerous narrow erratic vitrain bands. These along with mudclasts at top of narrow (one foot) mudstone unit indicate energetic basin of deposition. 296-297.3' sandstone with mudclasts.
297.3	312.4		Siltstone grading through mudstone back to siltstone.
312.4	316.3		Alternating fine sandstone and siltstone. Beds 1" thick. Many mudclasts 60° to core axis.
316.3	384		Massive dark mudstones. 100% recovery. There are occasional insignificant gradations into siltstone. At 338' there is a one foot band of erratic calcite stringers. At 371' there is one foot of mudstone breccia. Towards base of unit there are two narrow vitrain bands. Overall bedding from 90° to 70° to core axis.
384	421.8		Alternating fine grained sandstone and siltstone and dark mudstone. At 390 feet, one foot stringer of calcite. Current bedding everywhere evident. Towards base of the unit mudstone is carbonaceous.
421.8	446		Coal. Recovery 23' in 24.2' or > 95%. 423' - .2" parting. 423.7' - .2" parting. 426-430.4 shale parting. 443' - .25" parting. Last five feet of coal are harder - durain, otherwise good coal. <i>Coal 430.0 - 448.0</i>
446	486.4		Alternating fine sandstone, siltstone and carbonaceous mudstone. Current bedding, calcite filled fractures and numerous uneconomical vitrain bands. Mudstone predominates at base of unit becomes increasingly carbonaceous.
486.4	532		Coal good 95% recovery. Good looking coal. 488.4' to 489' bone coal, shaley coal. 489.2' - 2" shale parting. 499' to 505' shale parting. 524 to 524.7' shale parting. 5247 to 532 - 80% recovery. <i>Coal 486.0 - 499.5</i>
532	561		Carbonaceous mudstone (with many narrow coal bands) grading into sandstone and siltstone. <i>506.0 - 530.0</i>
561	607.5		Coal. 561 to 578 feet - one foot recovered. 578 to 590 feet - 5.3' recovered. 590 to 594 bone coal, mainly shale. 594 to 596 feet - 1.4' recovered. 596 to 605 feet - 4.3' recovered. 605 to 606.5 feet - shale parting. 606.5 to 607.5 - one foot coal. The coal recovered from this seam was highly comminuted. The more competent carbonaceous shale partings were heavily slickensided.
607.5	680		Faulted, brecciated sandstone coarse to fine grained. Numerous calcite fractures. Recovery is 100%. Slickensides are numerous. Bedding up to 45° to core axis. Average → 40 degrees to core axis.

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



Core Size  
HQ  
Hole No. 302  
Page 2

# Diamond Drill Geological Log



Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

Logged By: \_\_\_\_\_ Date: \_\_\_\_\_ Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From To Discard Reason:

680	706		Coarse grained sandstone bedding sixty degrees to core axis. The many vitrain bands are heavily slickensided. Current bedding evident. Unit is light colour.
706	732		Sandstone, finer grained darker than previous unit. 55 degrees to core axis. Several calcite fractures. 727 feet to 729 feet many narrow bedded slickensided coal bands in sandstone.
732	805.5		Sandstone, coarse grained, light grey, numerous narrow vitrain partings. Current bedded. The coal bands are slickensided. 753 to 755 feet brecciated, coaly sandstone. 70 degrees to core axis. 794 to 796 feet brecciated coaly sandstone.
805.5	877.6		Dark uniform mudstone shale. 65 degrees to core axis. Several slickensided coal partings and a few calcite fractures.
877.6	881.8		Coal, clarain and durain.
881.8	887.5		Mudstone, carbonaceous, shaley.
887.5	938		Sandstone, fine to medium grain, thinly bedded and cross-laminated, several large mudclasts near bottom, 20% mudstone few interbeds, 0.2' to 0.9' thick, sand clean near bottom.
938	957		Mudstone, 40% fine sand laminae and cross laminae.
957	983		Coal, clarain and vitrain, some clarain, crushed.
983	996.5		Mudstone, shaley.
996.5	1006.5		coal, clarain and durain.
1006.5	1025.1		Mudstone, very carbonaceous, shaley, vitrain lenses.
1025.1	1039.3		Mudstone, 30% sand laminae, bioturbation.
1039.3	1040.8		Sandstone, fine grain, laminae and cross laminae
1040.8	1043		Mudstone, carbonaceous.
1043	1044.8		Coal, durain. <i>Coal 1048.0 - 1072.0</i>
1044.8	1048.6		Mudstone. <i>parting 1066.0 - 1068.0</i>
1048.6	1072.8		Coal, clarain and durain.

Core Size

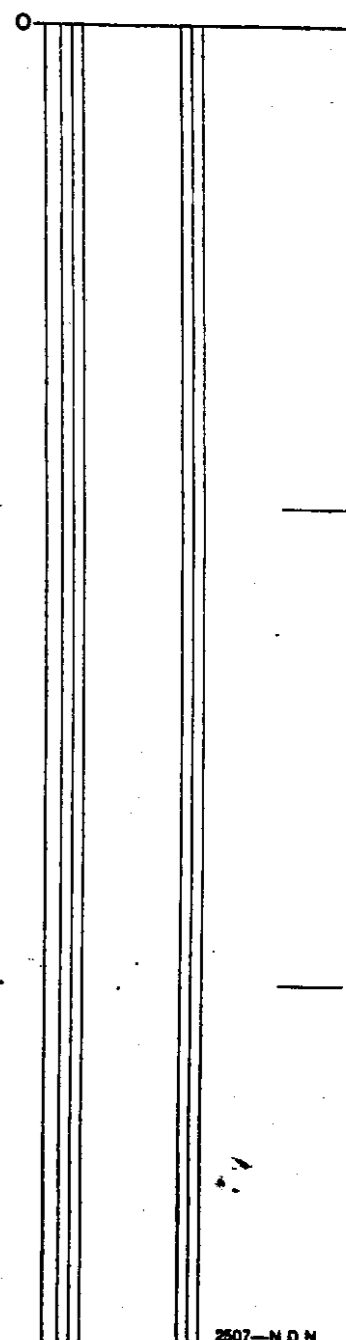
Hole No.

302

Page

3

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



# Diamond Drill Geological Log



Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

Logged By: \_\_\_\_\_ Date: \_\_\_\_\_ Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From To Discard Reason:

1072.8 1077.8 Mudstone.

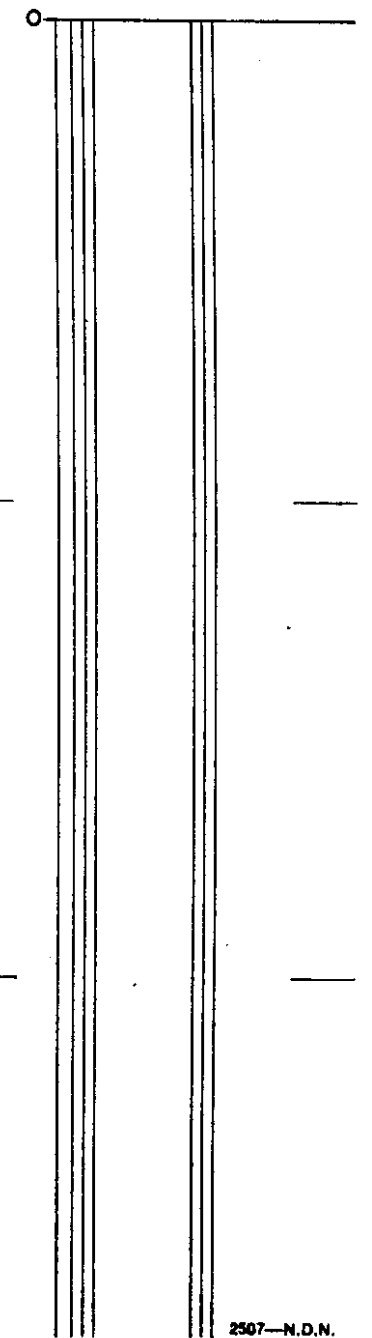
1077.8 1079.3 Coal.

1079.3 1086 Mudstone.

1086 End of hole.

40 Scale

Color Plot & Dips Ore Classes & Aver.



Core Size

Hole No.

Page

302

4



# Diamond Drill Geological Log



Objective:

Sampled:

Logged By:

Date:

Composites:

Block:

Sect.:

Place:

App. Bear:

App. Dip.:

Length:

From	To	Discard:	Reason:
		SUMMARY D.D.H. 302	DEPTH - 1,085 feet
80	85.4	Seam No. 10	48% Recovery
153.3	178	Seam No. 9	100% Recovery
191.4	195.8	Seam No. 8	100% Recovery
421.8	446	Seam No. 7	95% Recovery
486.4	532	Seam No. 5	95% Recovery
561	607.5	Repeat No. 5	40% Recovery
877.6	881.8	Minor Seam	76% Recovery
956.6	983.6	Unknown Seam	77% Recovery
997	1009	Unknown Seam	92% Recovery
1049	1072.8	Unknown Seam	98% Recovery

Hole No. 302 Elev. 6,429.6  
 Lat. 49°54'00" N Dep. 80°47'00" W  
 Elev. Th.  
 Top of 10 @ 6,349.6 | 43.4  
 Top of 9 @ 6,276.3 | 24.7  
 Top of 8 @ 6,235.2 | 41.1  
 Top of 7 @ 6,177.2 | 20.2  
 Top of 5 @ 5,943.2 | 45.6  
 Top of (Repeat) 5 @ 5,818.6 | 46.6

40 Scale  
 Color Plot & Dips  
 Ore Classes & Aver.

Core Size

Hole No.

Page

302

5

FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
80.0	85.4	Seam "10" RAW COAL					2.8	61.9	16.4	18.9	0, NA	0.74	
		CLEAN COAL					3.8	10.6	26.3	59.3	0, NA	0.96	4.3 % Clean Coal
153.3	178.0	Seam "9" RAW COAL					0.6	28.2	19.8	51.4	3½ 3½ 3½	0.41	
		CLEAN COAL					0.8	9.5	22.8	66.9	5,5,5	0.65	74.0 % Clean Coal
191.4	195.8	Seam "8" RAW COAL					0.5	23.4	20.9	55.2	4½,4,4	0.58	
		CLEAN COAL					0.6	11.2	23.7	64.5	7½ 7½ 7½	0.80	59.4 % Clean Coal
421.8	446.0	Seam "7" RAW COAL					0.5	20.7	22.3	56.5	5½ 5½ 6	0.39	
		CLEAN COAL					0.6	10.3	24.2	64.9	7½ 7½ 7½	0.66	73.1 % Clean Coal
486.4	532.6	Seam "5" RAW COAL					0.5	20.6	22.3	56.6	4,4,4½	0.36	
		CLEAN COAL					0.5	8.8	23.1	67.6	6,6,6	0.38	76.1 % Clean Coal
561.0	607.5	Seam "4" RAW COAL					0.5	44.7	18.9	35.7	1½ 1½ 1½	0.30	
		CLEAN COAL					0.5	11.7	21.7	66.1	3,3,2½	0.62	52.7 % Clean Coal
877.6	881.8	Seam "Minor" RAW COAL					0.3	18.1	21.3	60.3	7,7½,7	0.60	
		CLEAN COAL					0.5	11.2	22.4	65.9	7½ 7½ 7½	1.00	80.6 % Clean Coal

FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
956.6	983.6	Seam "Unknown" RAW COAL					0.5	26.1	19.1	54.3	4,4,4 $\frac{1}{2}$	0.58	
		CLEAN COAL					0.4	7.5	23.3	68.8	7 $\frac{1}{2}$ 7 $\frac{1}{2}$ 7 $\frac{1}{2}$	0.59	76.4 % Clean Coal
997.0	1009.0	Seam "Unknown" RAW COAL					0.4	33.4	20.7	45.5	7,6 $\frac{1}{2}$ ,7	0.49	
		CLEAN COAL					0.6	9.2	23.9	66.4	8 $\frac{1}{2}$ 8 $\frac{1}{2}$ 8 $\frac{1}{2}$	0.67	68.0 % Clean Coal
1049.0	1072.8	Seam "Unknown" RAW COAL					0.5	35.8	21.9	41.8	1 $\frac{1}{2}$ 1 $\frac{1}{2}$ 2	0.38	
		CLEAN COAL					0.3	11.2	20.8	67.8	4,4,4 $\frac{1}{2}$	0.53	67.3 % Clean Coal

# Diamond Drill Geological Log



K-FOREBING 70(2)A-2

Objective:		Sampled:		<b>312</b>	
Logged By: A.C.M.		Date: July 24/70			
Block:		Sect.:		Composites:	
		Place: <i>Clode Creek</i>		App. Bear:	
				App. Dip.:	
				Length:	

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.

From	To	Discard:	Reason:
		<i>Revised by radiation log</i>	
0	14	Overburden	
14	16	Rusty Fractured SST.	
16	22	Mudst. Dark. Badly broken up.	
22	37.5	SST. Med. grained. Current bedding	
37.5	41.5	Mudst. Dark Carbonaceous.	
41.5	54	SST. Fine to Medium Grained. Current bedding 65° to C.A.	
54	60	Mudst. Dark	
60	71	SST. Fine grained. Current Bedding	
71	83.7	Mudst. Dark	
83.7	106	Good Coal	100% Recovery 79.5 - 102.5
		97.5 - 98' Mudst. Parting	
		102 - 103.5 Shaley Band	
106	111	SST. Current Bedded 112' - 113' Brecciated	
111	116	Mudst. Dark Carbonaceous with a 3 foot sandy section in centre of unit.	
116	144	SST. Hard and coarse. Much current bedding.	
144	146	Mudst. Carbonaceous	
146	154	SST. Coarse	
154	158	Mudst. Very Carbonaceous.	
158	212	SST. Medium grained current bedded.	
212	227.5	Mudst. Very Carbonaceous	229.0 - 241.0
227.5	244.5	Coal Good Quality	95% Recovery
		233 - 233.5 Shaley Parting	

Core Size  
Hole No. 303  
Page 1

# Diamond Drill Geological Log



Objective:

Sampled:

Logged By: **A.C.M.**

Date: **July 24, 1970**

Composites:

Block:                      Sect.:                      Place:                      App. Bear:                      App.: Dip.:                      Length:

From	To	Discard:	Reason:
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244.5	251	Sandy Mudst.	
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251	252	Coal	
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252	292	SST. Current Bedded. Medium to Coarse Grained.	
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292	296	Mudstone	
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296	306	Coal 100% Recovery	292.0 - 301.5
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306	315	Mudst. Very carbonaceous	
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315	380	SST. Fine to medium grained. Current bedded with a few muddy horizons.	376.0 - 399.0
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380	403	Coal 95% recovery Did not core well, soft friable coal. 393-393.5 shale parting. Last four feet of seam very dirty, high % shale.	
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403	439	Mudst. Massive	
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439	444	SST. Coarse grained, hard bedding 30° to C.A.	
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444	520	Mudst. and fine SST. Interbedded much current evidence	
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520	531	Mudst. Very carbonaceous	
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531	546	Coal 92% Recovery	524.0 - 540.5
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546	566	Mudst.	
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			Core Size
			Hole No. 303
			Page 2

40 Scale

Color Plot & Dips      Ore Classes & Aver.

0

# Diamond Drill Geological Log



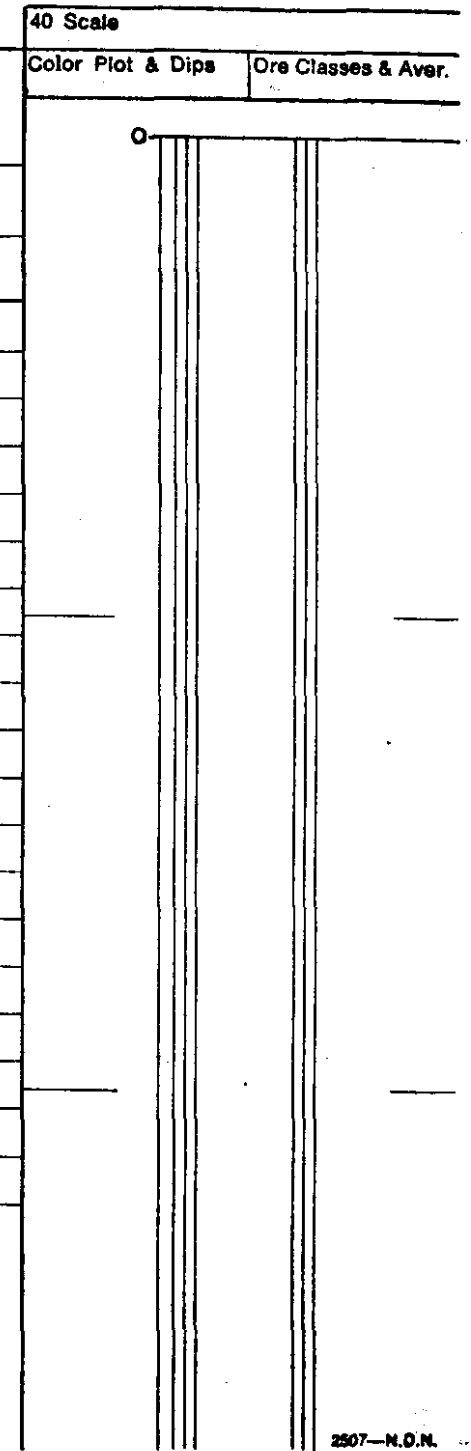
Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_  
 Logged By: DEM 303 Date: \_\_\_\_\_ Composites: SUMMARY Depth 566'  
 Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From To Discard Reason

From	To	Discard	Reason
83.7	106	Seam # 14 100% Recovery	
		2 partings 97.5 - 98, and 102 - 103.5'	
227.5	244.5	Seam # 13 95% Recovery	
		Shale parting 233 - 233.5	
296	306	Seam # 12 100% Recovery	
380	403	Seam # 11 95% Recovery	
		Shale parting at 393 - 393.5	
531	546	Seam # 9 92 % Recovery	

Hole No.	<u>303</u>	Elev.	<u>7,167.4</u>
Lat.	<u>49° 40' 7"</u>	Dep.	<u>81° 35' 16"</u>
		Elev.	Th.
Top of	<u>14</u>	@	<u>7,103.7</u>   <u>26.3</u>
Top of	<u>13</u>	@	<u>6,959.9</u>   <u>16.5</u>
Top of	<u>12</u>	@	<u>6,841.4</u>   <u>10.0</u>
Top of	<u>11</u>	@	<u>6,807.4</u>   <u>22.5</u>
Top of	<u>9</u>	@	<u>6,676.4</u>   <u>15.0</u>

Core Size \_\_\_\_\_  
 Hole No. 303 Page 3



FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
83.7	106.0	Seam "13"					0.8	29.4	23.8	56.0	6½, 7, 6½	0.71	
		CLEAN COAL					0.8	7.6	27.4	64.2	8, 8, 8	0.65	60.1 % Recovery
227.0	244.5	Seam "12"					0.7	13.8	27.0	58.5	8, 8, 7½	0.69	
		CLEAN COAL					0.8	8.2	27.6	63.4	8, 8, 8	0.67	88.8 % Recovery
296.0	306.0	Seam "Upper 11"					0.6	22.3	23.9	53.2	7½, 7½, 7½	0.58	
		CLEAN COAL					0.8	8.1	26.9	64.5	8½, 8, 8½	0.63	83.6 % Recovery
380.0	403.0	Seam "11"					0.7	39.5	19.2	40.0	4½, 4½, 4½	0.55	
		CLEAN COAL					0.6	8.4	25.7	65.6	8½, 8½, 8	0.75	53.4 % Recovery
531.0	546.0	Seam "9"					0.6	23.8	21.4	54.2	3½, 3½, 3½	0.36	
		CLEAN COAL					0.6	7.7	23.6	68.0	6, 6, 5½	0.43	71.2 % Recovery

FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
296	306	Seam "Upper" RAW COAL					0.6	22.3	23.9	53.2	7½, 7½, 7½	0.58	
		CLEAN COAL					0.8	8.1	26.9	64.5	8½, 8, 8½	0.63	83.6 % Recovery
380	403	Seam "11" RAW COAL					0.7	39.5	19.2	40.6	4½, 4½, 4½	0.55	
		CLEAN COAL					0.6	8.4	25.7	65.6	8½, 8½, 8	0.75	53.4 % Recovery
531	546	Seam "9" RAW COAL					0.6	23.8	21.4	54.2	3½, 3½, 3½	0.36	
		CLEAN COAL					0.6	7.7	23.6	68.0	6, 6, 5½	0.43	71.2 % Recovery



# Diamond Drill Geological Log



K-FORGING 70(3)A-2

Objective:

Sampled:

Logged By: D.M.

Date: June, 1970

Composites:

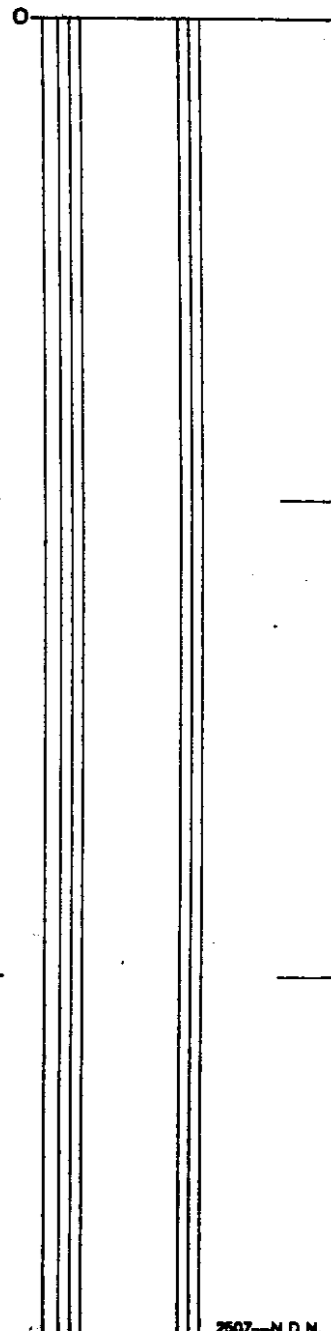
312

Block: Sect: Place: App. Bear: App.: Dip.: Length:

Clode Creek

From	To	Discard:	Reason:
0	22	Casing, no core.	
22	25.6	Coal durain and clarain (drillers may have tri-coned through one or two feet).	S14
25.6	28.9	Mudstone, very carbonaceous.	
28.9	34	Coal, clarain and durain.	Revised by radiation log S14
34	34.3	Mudstone.	
34.3	35.5	Coal.	S14
35.5	38.3	Mudstone, carbonaceous, vitrain bands.	
38.3	43.2	Coal, durain and clarain.	S14
43.2	44.2	Mudstone, very carbonaceous.	
44.2	59.2	Sandy siltstone, highly fractured.	
59.2	79.2	Sandstone, very fine grain, mostly massive with a few thin beds.	
79.2	103.6	Sandstone, fine grain, 15% mudstone, flaser bedding. lodecast, laminae and cross laminae.	
103.6	113.2	Mudstone, 30% sand laminae and thin beds.	
113.2	127.4	Sandstone, fine grain, some flaser bedding, laminae and cross laminae mudclast near bottom, also lodecast.	
127.4	129.5	Mudstone.	
129.5	133.5	Sandstone, fine grain, laminated and thinly bedded.	
133.5	136.8	Mudstone.	
136.8	139.5	Sandstone, fine grain, thinly bedded and laminated. Cross stratification.	
139.5	147.5	Mudstone.	
154.5	172.5	Coal.	152.0 - 170.0 S18
172.5	176	Mudstone.	
176	176.8	Sandstone, fine grain, laminae, cross laminae and lodecast.	
176.8	181.4	Mudstone.	

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



Core Size  
HQ  
Hole No. 304  
Page 1

# Diamond Drill Geological Log



Objective:

Sampled:

Logged By: D.M.

Date: JUNE, 1970

Composites:

Block:

Sect.:

Place:

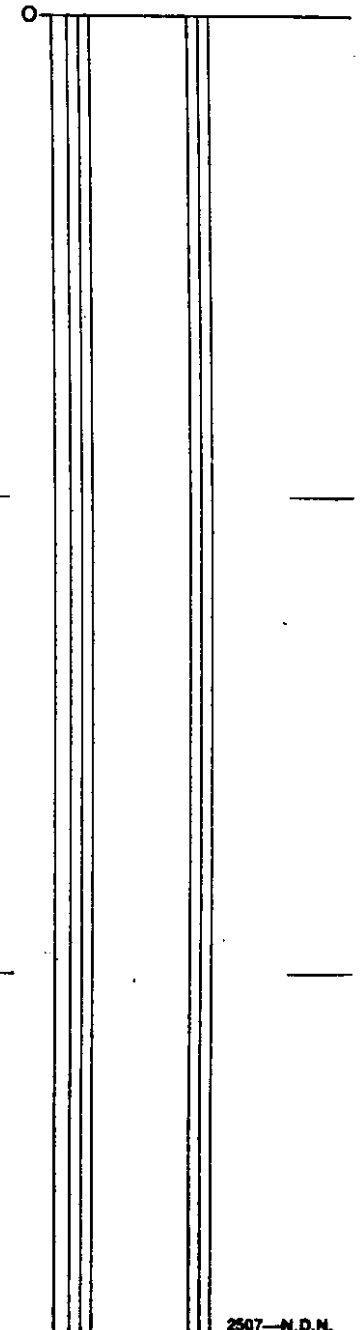
App. Bear:

App. Dip.:

Length:

From	To	Discard:	Reason:
181.4	183.4		Sandstone, fine grain, laminae, lodecast, some bioturbation, 40% mudstone.
183.4	185		Mudstone.
185	186		Sandstone, fine grain, thinly bedded, cross stratified.
186	188		Mudstone.
188	191.9		Sandstone, fine grain, cross stratified, thinly bedded, 35% mudstone.
191.9	197.6		Sandstone and mudstone interbedded, beds 0.2 feet to 0.5 feet thick, sandstone is cross stratified.
197.6	200.3		Mudstone.
200.3	216		Sandstone, fine grain, cross laminae, laminae, lodecast, 10% mudstone.
216	231		Siltstone, sandy, 20% + sand.
231	241.3		Coal, clarain and durain. <span style="margin-left: 100px;">232.0 - 246.0</span> <span style="margin-left: 20px;"><i>parting 240.0 - 242.4</i></span>
241.3	244		Mudstone, fractured.
244	245.8		Coal, durain.
245.8	255		Mudstone, fractured and brecciated.
255	262		Siltstone, brecciated, definite fault, some gouging.
262	276		S ndy siltstone.
276	284.5		Sandstone, fine grain, laminae and cross laminae, 35% mudstone.
284.5	293.8		Mudstone, 10% sand.

40 Scale  
Color Plot & Dips    Ore Classes & Aver.



Core Size

Hole No.

Page

304

2

# Diamond Drill Geological Log



Objective:

Sampled:

Logged By: D.M.

Date: July 6, 1970

Composites:

Block:

Sect.:

Place:

App. Bear:

App. Dip.:

Length:

From	To	Discard:	Reason:
293.8	296	Coal, clarain	Coal 294.0 - 306.0
296	296.5	Mudstone	
296.5	306.5	Coal, clarain	
306.4	306.8	Mudstone	
306.8	308.0	Coal	
308.0	312	Mudstone	310.0 - 313.0
312	313.4	Coal, clarain	
313.4	314.6	Clarain, durain and shaley coal	
314.6	315	Coal	
315	317	Mudstone - with vitrain bands	
317	319.5	Coal clarain	
319.5	339.8	Mudstone (brecciated at 325.7, breccia at 334-335-Coal in breccia)	
339.8	376.2	Sandstone; very fine grain, flaser bedding, laminae and cross laminae, lodecast	
376.2	400.3	Mudstone (brecciated 398-400)	
400.3	401	Sandstone; fine grain, small mudclast; cross stratification, laminae and thinbeds.	
401	402.5	Coal, vitrain and clarain	
402.5	403.5	Mudstone	
403.5	405	Sandstone, thinly bedded and laminated penecontemporaneous faulting	
405	414	Mudstone, 50% siltstone	
414	426.4	Siltstone; 45% fine sand in beds up to 0.3' thick and disseminated, sandstone beds are cross laminated	Core Size HQ
426.4	429.8	Sandstone; fine grain, massive; calcite fracture filling	Hole No. 304
429.8	446.3	Siltstone; sandy	Page 3

40 Scale

Color Plot & Dips

Ore Classes & Aver.

# Diamond Drill Geological Log



Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_  
 Logged By: D.M. Date: July 6, 1970 Composites: \_\_\_\_\_  
 Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From	To	Discard:	Reason:
446.3	448.8		Sandstone; fine grain, laminae, 12% mudstone
448.8	454.4		Siltstone
454.4	456		Sandstone; fine grain, laminae and cross laminae, 25% mudstone
456	466		Mudstone <i>Coal 463.0 - 484.0</i>
466	486.8		Coal
486.8	494.9		Mudstone (fractured 493') - sandy 494-494.9
494.9	495.4		Coal <i>Coal 496.0 - 498.0</i>
495.4	497.9		Mudstone
497.9	503.1		Coal
503.1	506.2		Mudstone
506.2	507.7		Sandstone; fine grain, laminae and cross laminae
507.7	510.9		Mudstone
510.9	512.4		Sandstone; fine to medium grain, flaser bedding cross laminae
512.4	516.2		Siltstone
516.2	517.5		Sandstone; fine grain, laminae - 20% mudstone
517.5	523.4		Mudstone
523.4	524.3		Sandstone; very fine grain, 30% mudstone
524.3	525.4		Mudstone
525.4	529.8		Sandstone; fine grain, laminae and cross laminae, 10% mudstone-flaser bedding, calcite fracture filling
529.8	544		Mudstone
544	554.3		Siltstone; 40% very fine grain sand
554.3	557.5		Mudstone
557.5	567.3		Siltstone, 50% Mudstone

Core Size  
 HQ  
 Hole No.  
 304

# Diamond Drill Geological Log



Objective:		Sampled:		40 Scale	
Logged By: D.M.		Date: July 7, 1970		Composites:	
Block:	Sect.:	Place:	App. Bear:	App. Dip.:	Length:
From	To	Discard:	Reason:		
567.3	580.2				
		Sandstone, fine grain, inter-bedded mudstone, lodocast, flame structure, penecontemperaneous faulting and folding, calcite fracture filling			
580.2	581.4				
		Sandstone; medium grain, mudclast			
581.4	591				
		Sandstone; fine to very fine grain, 35% siltstone, occasional bed of medium grain sandstone from 0.2' to 0.4' thick			
591	597.6				
		Mudstone with interbedded very fine grain sandstone and siltstone			
597.6	599.6				
		Mudstone			
599.6	605.9				
		Coal; vitrain, clarain <i>coal 599.0 - 604.0</i>			
605.9	606.2				
		Shale <i>606.0 - 608.0</i>			
606.2	609.8				
		Coal; vitrain clarain <i>609.5 - 614.0</i>			
609.8	610				
		shale			
610	616				
		Coal; vitrain clarain			
616	616.4				
		Sandstone			
616.4	620.0				
		Sandstone, black, 50% medium grain sand, argillaceous			
620.0	620.3				
		Coal			
620.3	626.8				
		Mudstone			
626.8	642.2				
		Coal <i>625.0 - 631.5      634.0 - 640.0</i>			
642.2	646.8				
		Mudstone, 10% fine sand			
646.8	653.0				
		Coal, brecciated <i>644.0 - 649.5</i>			
653.0	666.0				
		Sandstone, fine grain, laminae and cross laminae, flaser bedding, lodocast, 15% mudstone, dip 22°			
666	667				
		Mudstone, shaley			
667	668				
		Mudstone and coal breccia - no sample			
668	669				
		Mudstone			
669	670				
		Coal, Vitrain and clarain - no sample			

Core Size

HQ

Hole No.  
DDH 304

Page  
5

# Diamond Drill Geological Log



Objective:

Sampled:

Logged By: D.M.

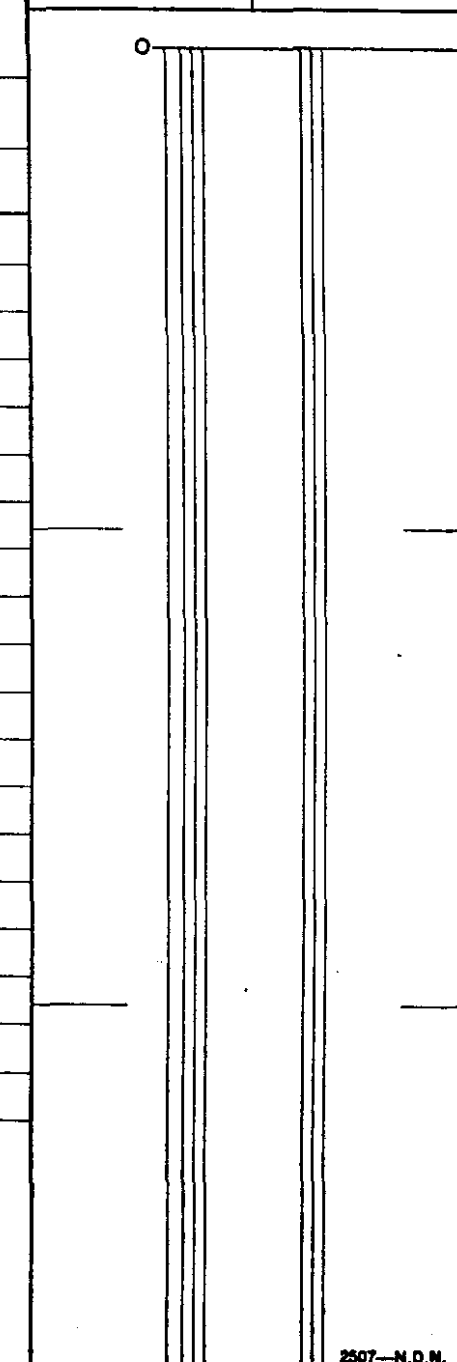
Date: July 8, 1970

Composites:

Block:                      Sect.:                      Place:                      App. Bear:                      App. Dip.:                      Length:

From	To	Discard:	Reason:
670	671	Mudstone	
671	675	Sandstone; very fine grain, 25% mudstone	
675	682	Siltstone	
682	685	Sandstone; fine grain, massive	
685	696	Sandstone, medium to fine grain, thinbedded, cross bedding, flaser bedding mudclast	
696	709.4	Sandstone; fine grain, laminae, cross laminae dip 20°	
709.4	709.8	Mudstone	
709.8	713.5	Sandstone; fine to medium grain, dip 10° laminae and cross laminae	
713.5	715.2	Siltstone	
715.2	720.1	Sandstone; fine grain, cross laminae, lodecast, coarse grain <del>ferrous</del> towards bottom of interval	
720.1	721.2	Mudstone	
721.2	735.8	Sandstone; fine grain, coarser grain towards bottom, laminae, cross laminae, dip 15°	
735.8	738.6	Breccia	
738.6	741.5	Siltstone	
741.5	743.6	Sandstone; cross laminae, fine grain	
743.6	744.6	Siltstone	
744.6	747.6	Sandstone; fine to medium grain, cross laminae	
747.6	753.0	Siltstone	
753.0	756.5	Sandstone, fine to medium grain, cross laminae, flame structure and or bioturbation, penecontemperanous folding	
756.5	758.7	Siltstone	
758.7	759.5	Sandstone; fine grain, cross laminae, flaser bedding	
759.5	775.6	Mudstone with over 2' siltstone bed	
775.6	776.7	Coal, vitrain No Sample	

40 Scale  
Color Plot & Dips      Ore Classes & Aver.



Core Size  
HQ

Hole No. 304

Page 6

# Diamond Drill Geological Log



Objective:

Sampled:

Logged By: D.M.

Date: July 9-10, 1970

Composites:

Block:

Sect:

Place:

App. Bear:

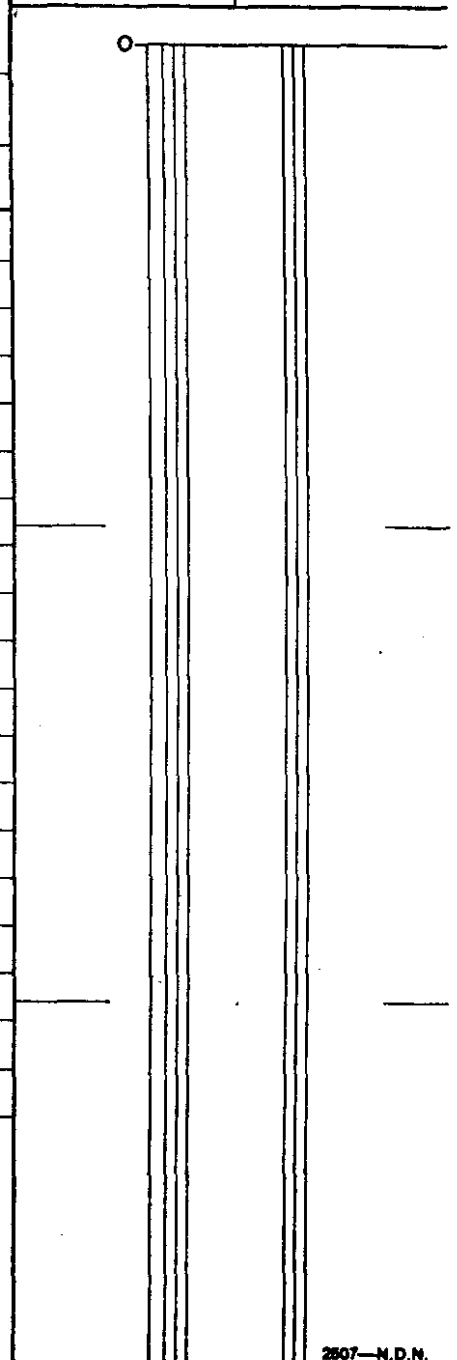
App. Dip:

Length:

From To Discard: Reason:

776.7	785.3	Mudstone, silty	
785.3	796.4	Coal, vitrain and clarain; 1' shale 790-791	783.0 - 788.0      791.0 - 794.0
796.4	797.4	Siltstone	
797.4	800.6	Sandstone, medium grain, thinly bedded, cross bedding, lodecast; dip 22°	
800.6	801.6	Mudstone	800.0 - 802.5
801.6	806	Coal; vitrain, clarain	
806	810.2	Mudstone, same calcite fracture filling	
810.2	812.5	Coal	
812.5	820	Mudstone	
		820° END OF HOLE	

40 Scale  
Color Plot & Dips      Ore Classes & Aver.



Core Size

HQ

Hole No. 304

Page 7

# Diamond Drill Geological Log



Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

Logged By: \_\_\_\_\_ Date: \_\_\_\_\_ Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From To Discard: Reason:

		SUMMARY D.D.H. 304 - Length - 820.0 feet.	
22.0	43.2	Seam 14 - partings 25.6 - 289; 34.0 - 34.3; 35.5 - 38.3)	
154.0	172.5	Seam 13 - partings	
231.0	241.3	Seam 12	
293.8	306.4	Seam 11 - parting 296.0 - 296.5	
466.0	486.8	Seam 9	
497.9	503.1	Seam 8	
599.6	616.0	Seam 7 - partings 605.9 - 606.2; 609.8 - 610.0	
626.8	653.0	Seam 7 (lower) - parting 642.2 - 646.8	
785.3	806.0	Seam 5? - parting 796.4 - 801.6)	

Core Size \_\_\_\_\_  
 Hole No. \_\_\_\_\_ Page \_\_\_\_\_

304

40 Scale
Color Plot & Dips Ore Classes & Aver.



**FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD**

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
22.0	43.2	Seam "13"					0.9	30.9	23.6	44.6	4½, 4½, 5	0.52	
		CLEAN COAL					0.7	8.6	28.6	62.1	8, 8, 8	0.72	63.3 % Clean Coal
													Recovery
154.5	172.5	Seam "12"					0.7	8.8	27.1	63.4	7½, 7½, 7½	0.71	
		CLEAN COAL					1.2	8.1	28.2	62.5	8, 8, 8	0.85	95.9 % Clean Coal
													Recovery
231.0	245.8	Seam "Upper 11"					0.7	32.7	21.5	45.1	6, 6½, 6½	0.47	
		CLEAN COAL					0.3	8.6	27.9	63.2	8, 8, 8½	0.82	59.3 % Clean Coal
													Recovery
293.8	319.5	Seam "11"					0.7	43.9	19.1	36.3	3, 3, 3½	0.71	
		CLEAN COAL					0.6	7.8	26.6	65.0	8, 8½, 8½	0.91	39.1 % Clean Coal
													Recovery
466.0	486.8	Seam "9"					0.6	28.3	20.6	50.5	3, 3, 3½	0.41	
		CLEAN COAL					0.7	7.5	24.6	67.2	8, 8, 8	0.70	62.6 % Clean Coal
													Recovery
497.4	503.1	Seam "8" Minor					0.7	33.8	18.7	46.8	3½, 3½, 3½	0.80	
		CLEAN COAL					0.4	8.2	23.9	67.5	7½, 7½, 7½	0.88	59.5 % Clean Coal
													Recovery

FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
599.6	616.0	Seam "Upper 7" RAW COAL					0.6	31.3	20.0	48.1	5,5,5	0.44	
		CLEAN COAL					0.5	7.7	24.5	67.3	8,7½,7½	0.55	73.2 % Clean Coal
													Recovery
626.0	653.0	Seam "Lower 7" RAW COAL					0.4	36.1	20.0	43.5	3½, 3½, 3½	0.47	
		CLEAN COAL					0.7	8.6	23.9	66.8	7½, 7½, 7½	0.55	51.8 % Clean Coal
													Recovery
785.3	796.4	Seam "Upper 5" RAW COAL					0.5	44.9	18.0	36.6	1½, 1, 1	0.33	
		CLEAN COAL					0.5	8.3	24.1	67.2	9,9,9	0.59	41.6 % Clean Coal
													Recovery
801.6	810.2	Seam "Lower 5" RAW COAL					0.4	20.7	19.9	59.0	7,7,7	0.66	
		CLEAN COAL					0.4	7.5	23.6	68.5	9,8½,9	0.78	69.7 % Clean Coal
													Recovery

# Diamond Drill Geological Log



K-FROING 70(3)A-2

Objective: \_\_\_\_\_  
 Logged By: D.M. \_\_\_\_\_  
 Date: 7-10-70 \_\_\_\_\_

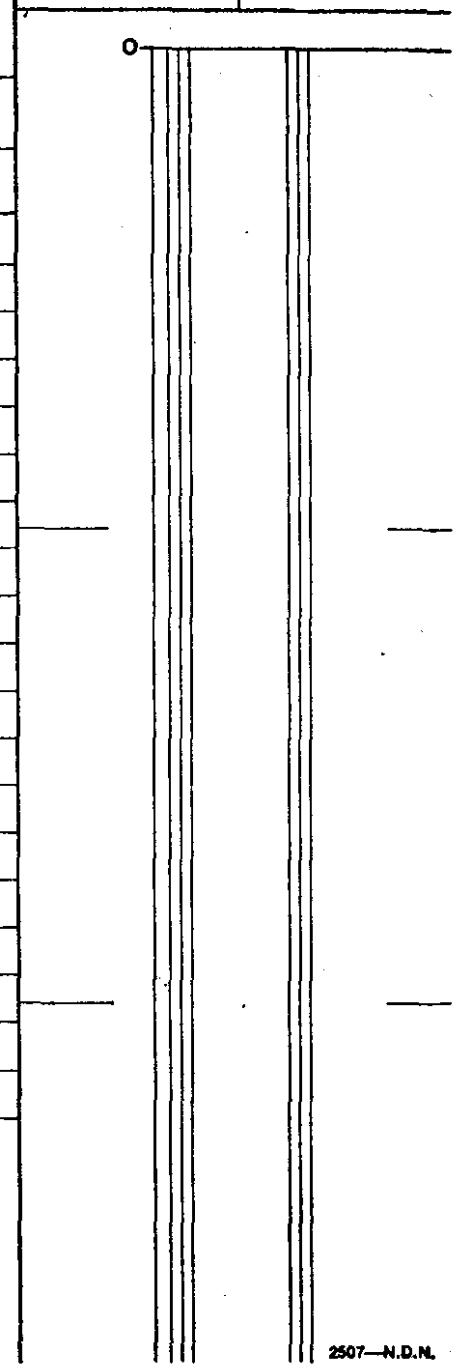
Sampled: \_\_\_\_\_  
 Composites: \_\_\_\_\_

312

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: *Eagle* App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From	To	Discard:	Reason:
0	21	Nocore Tricuum drilling	<i>Revised by radiation log</i>
21	22.8	Mudstone	
22.8	31.5	Sandstone; very fine to medium grain, lodecast, cross laminae and cross bedding, flaser bedding - 10% mudstone laminae and thin beds	
31.5	32.5	Mudstone	
32.5	37.9	Siltstone, with interbeds of fine grain sand showing lodecast, cross laminae, etc.	
37.9	47.7	Mudstone, top 1' fractured	
47.7	50.7	Siltstone; 50% very fine grain sand, massive	
50.7	70.1	Mudstone, fractured	<i>Coal 67.0 - 69.0</i>
70.1	71	Very carbonaceous Mudstone breccia	
71	75	Mudstone; 0.3' coal seam, fractured and brecciated	<i>73.0 - 81.0</i>
75	83.7	Coal, vitrain and durain	
83.7	84.2	Mudstone	
84.2	85.0	Sandstone; fine grain, laminae of mudstone 40%	
85.0	88	Mudstone	
88	92.6	Sandstone; fine grain, flaser bedding, siltstone laminae	
92.6	95	Mudstone breccia	
95	96	Sandstone; fine grain	
96	116	Mudstone breccia	
116		Sandstone; fine to medium grain, cross bedded	

40 Scale  
 Color Plot & Dips  
 Ore Classes & Aver.



Core Size HQ  
 Hole No. DDH 305 Page 1

# Diamond Drill Geological Log



Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

Logged By: D.M. Date: 7-11-70 Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From	To	Discard:	Reason:
	126.2	10% Mudstone interbeds, lodecast flame structure	
126.2	128.9	Siltstone; 30% fine sand interbeds	
128.9	133.7	Mudstone	
133.7	134.0	Coal - vitrain	
134	141	Mudstone; 20% siltstone, highly fractured 138' to 141'	Coal 140.0 - 143.0
141	144.8	Coal	
144.8	145.8	Mudstone	
145.8	146.7	Coal	
146.7	149.8	Mudstone	
149.8	167.4	Coal ( Parting 150.8 - 151.3 - Mudstone) , ( Parting 155.3 - 156.0)	Coal 150.0 - 153.0
167.4	168.4	Mudstone	
168.4	171	Coal	Coal 160.0 - 169.0
171	176	Mudstone	
176	182.7	Sandstone; very fine grain to fine grain, laminae and cross laminae, dip 19°	
182.7	194.4	Siltstone; sandy - 20%	
194.4	238.4	Sandstone; fine to medium grain, cross bedding, lodecast, 5% mudstone, dip 20°	
238.4	256.8	Sandstone; very fine grain with interbedded siltstone 50% v.f.g. sand, cross bedding and laminae, lode cast, current ripples	
256.8	260.5	Mudstone	
260.5	263.3	Coal, high vitrain	Coal 260.0 - 285.0

Core Size  
HQ

Hole No. DDH 305

Page 2

40 Scale

Color Plot & Dips Ore Classes & Aver.

# Diamond Drill Geological Log



Objective:

Sampled:

Logged By: D.N.

Date: 7-12-70

Composites:

Block:                      Sect.:                      Place:                      App. Bear:                      App. Dip.:                      Length:

From	To	Discard:	Reason:
263.3	265.2	Mudstone, vitrain bands	
265.2	287.5	Coal	Coal 271.0 - 281.0
287.5	294	Mudstone; containing a few sandstone beds $\frac{1}{2}$ " thick	
294	295	Coal	
295	297.5	Sandstone, fine grain agglutaceous	
297.5	298.5	Coal	
298.5	300.1	Mudstone	
300.1	303.8	Sandstone, fine grain, 40% siltstone / laminae and thin beds, lodecast and flame structure	
303.8	317	Mudstone - some siltstone	
317	317.6	Coal	
317.6	318.2	Mudstone	
318.2	325.3	Sandstone; fine grain cross laminae, 20% mudstone	
325.3	333	Mudstone	
333	334	Sandstone, fine grain thinly bedded, cross stratified	
334	371.9	Mudstone, flaser bedding structure, laminae and thin bedding and cross bedding of sand 40%	
371.9	387.7	Coal (381 - 384 - 1.5' shale) (384 - 387 - 0.2' shale)	
387.7	389.8	Mudstone	
389.8	391	Siltstone; sandy, 40% thin sand beds	
391	394	Sandstone; very fine grain	
394	396.2	Mudstone	

Core Size      RQ

Hole No.      DDH 305

Page 3

40 Scale

Color Plot & Dips

Ore Classes & Aver.

# Diamond Drill Geological Log



Objective:

Sampled:

Logged By: D.M.

Date: 7-16-70

Composites:

Block:                      Sect.:                      Place:                      App. Bear:                      App. Dip.:                      Length:

From	To	Discard:	Reason:
396.2	402.5	Sandstone; fine grain, lodecast ripple marks	
402.5	413.5	Siltstone	
413.5	426	Sandstone, fine grain, convolute bedding, small scale penecontemperaneous faulting, dark color slightly argillaceous, dip 8°	
426	451.3	Coal	426.0 - 435.0
451.3	453.5	Mudstone	443.0 - 446.5
453.5	482.8	Sandstone, fine to medium grain, laminated and thinly bedded, cross stratification, some flaser bedding, some convolute beds, 20% siltstone, small vitrain band, dip 14°	
482.8	487.3	Siltstone	
487.3	550	Sandstone; fine to medium grain, thinly bedded, cross stratified, lode cast, penecontemperancus faulting, calcite fracture filling, dip 15°	
550	557	Siltstone	
557	559	Sandstone; fine grain, thinly bedded	
559	562	Siltstone	
562	565.2	Sandstone 30% siltstone; fine grain, lodecast and convolute bedding	
565.2	571.4	Mudstone	
571.4	575	Sandstone; thinly bedded, cross stratified	
575	579.8	Siltstone	
579.8	583.5	Sandstone; fine grain, cross stratified with 30% interbedded siltstone, dip 13°	
583.5	587.3	Mudstone with interbedded siltstone, siltstone 40%	
587.3	594.4	Siltstone with thin interbeds of fine sandstone	
594.4	598.5	Sandstone, fine grain with interbedded siltstone, laminae, current ripples convolute bedding and bioturbation	

Core Size

HQ

Hole No.

DDH 305

Page 4

40 Scale

Color Plot & Dips

Ore Classes & Aver.

# Diamond Drill Geological Log



Objective:		Sampled:		40 Scale	
Logged By: D.M.		Date: 7-17-70		Color Plot & Dips	
Block:		Composites:		Ore Classes & Aver.	
Sect.:		Place:		0	
App. Bear:		App. Dip.:			
Length:					
From	To	Discard:	Reason:		
598.5	611	Siltstone			
611	615	Sandstone, fine grain, thin bedded, lodecast and flame structure			
615	619.3	Siltstone, dip 10°			
619.3	620.5	Sandstone; fine grain, massive			
620.5	621.8	Siltstone			
621.8	622.5	Sandstone, lodecast and flame structures			
622.5	626	Siltstone with sand laminae - 15% sand laminae			
626	637	Mudstone			
637	652.9	Coal vitrain, clarain	Coal 634.0 - 652.5		
652.9	653.4	Sandy siltstone			
653.4	654	Coal Vitrain, clarain			
654	657	Mudstone			
657	661	Coal Vitrain, clarain			
661	666	Mudstone			
666	666.6	Coal Vitrain, clarain			
666.6	668.3	Mudstone			
668.3	673	Coal Vitrain, clarain			
673	683.3	Mudstone			
683.3	685.6	Sandstone; very fine grain argillicous			
685.6	695	Mudstone			
695	711	Siltstone; 20% sand laminae, some lodecast			
711	718	Sandstone; very fine to fine grain, laminae and cross laminae			
		25% interbedded siltstone			

Core Size

Hole No. DDH 305

Page 5

# Diamond Drill Geological Log



Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

Logged By: D.M. Date: 7-18-70 Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App.: Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From	To	Discard:	Reason:
718	725.1	Siltstone	
725.1	730.3	Sandstone; very fine to fine grain, laminae, cross laminae, lodecast, 25% siltstone and argillaceous material, dip 10°	
730.3	735.5	Sandstone and siltstone, laminae and thin beds	
735.5	740.5	Sandstone, very fine to fine grain, inter laminae of siltstone, laminae, cross laminae; lode cast, bioturbation	
740.5	751	Mudstone	
751	786	Coal	751.0 - 784.0
786	787	Fault - clay gouge	
787	792.1	Siltstone with interbedded sandstone and mudstone	
792.1	793.6	Breccia, some calcite filling	
793.6	793.7	Mudstone	
793.7	801	Coal	
801	806	Sandstone with interbedded siltstone, sandstone beds 0.1' to 0.4' thick, lodecast, dip 23°	
Hole stopped 806' 11:00 PM 7-19-70			

Core Size: HQ

Hole No. DDH 305 Page 6

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



# Diamond Drill Geological Log



Objective:

Sampled:

Logged By: \_\_\_\_\_ Date: \_\_\_\_\_

Composites:

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App.: Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From To Discard: Reason:

SUMMARY D.D.H. 305 - Length 806.0 feet.

75 83.7 Seam 16

141 171 Seam 14 - partings 144.8-145.8; 146.7 - 149.8; 150.8 - 151.3; 155.3 - 156.0; 167.4 - 168.4)

260.5 287.5 Seam 13 - parting 263.3 - 265.2)

371.9 ~~387.7~~ Seam 12 - partings 380.0 - 384.0 = 1.5' shale; 384.0 - 387.0 = 0.2' shale).

426.0 451.3 Seam 11

637.0 654.0 Seam 9 - parting 652.9 - 653.4.

657.0 661.0 Seam 9 (lower)

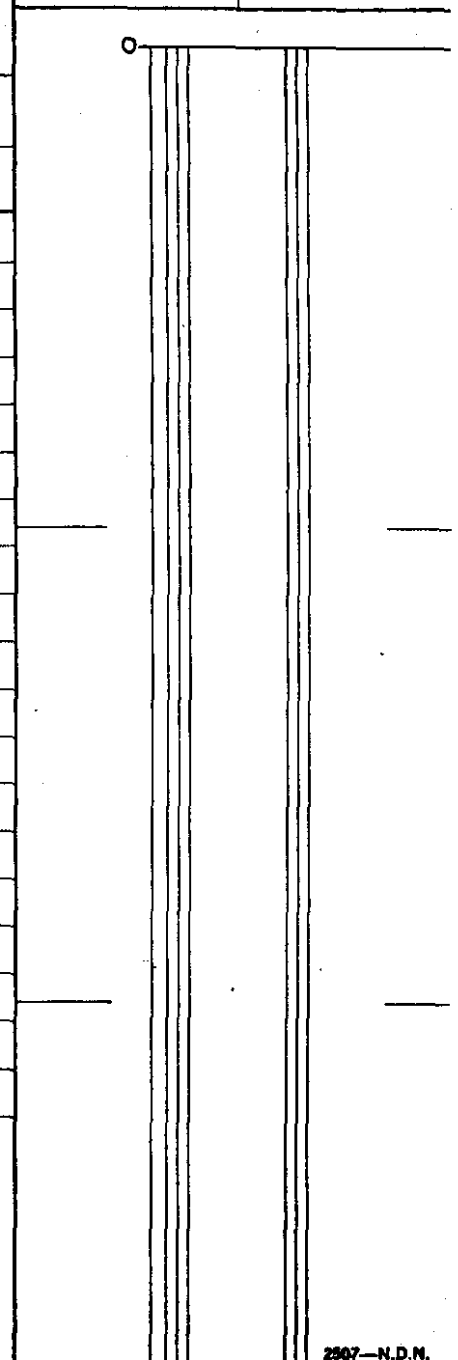
668.3 673.0 Seam 8

751.0 786.0 Seam 7

793.7 801.0 Seam 7 (lower).

40 Scale

Color Plot & Dips Ore Classes & Aver.



Core Size \_\_\_\_\_  
 Hole No. 305 Page \_\_\_\_\_

**FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD**

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
75.0	83.7	Seam "14"					1.0	24.9	25.5	48.6	7,7½,7½	0.77	
		CLEAN COAL					0.9	10.1	29.3	59.7	9,9,9	0.80	69.9 % Recovery
141.0	171.0	Seam					0.8	48.4	18.5	32.3	4,4,4½	0.60	
		CLEAN COAL					0.6	7.7	30.3	61.3	9,9,9	0.76	43.1 % Recovery
260.5	287.5	Seam "12"					0.9	21.1	24.3	53.7	7,7,7,	0.66	
		CLEAN COAL					0.9	8.45	27.4	63.3	8,8,8	0.62	77.1 % Recovery
371.9	387.7	Seam "Upper 11"					0.6	41.1	20.2	38.1	4,4,4	2.60	
		CLEAN COAL					0.75	7.9	26.8	64.6	8,8,8	0.62	57.6 % Recovery
426.0	451.3	Seam "11"					0.4	48.3	17.6	33.7	3,3,2½	0.99	
		CLEAN COAL					0.9	10.2	23.8	65.1	7,7½,7	0.58	43.8 % Recovery
637.0	661.0	Seam "9"					0.6	29.3	24.0	46.1	3,3,2½	0.47	
		CLEAN COAL					0.6	7.3	25.8	66.3	7½,7½	0.79	39.2 % Recovery
666.0	673.0	Seam "8"					0.5	27.2	22.0	50.3	7,6½,6½	0.82	
		CLEAN COAL					0.4	8.5	24.8	66.3	8,8,8	0.93	58.9 % Recovery

FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION		SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
751.0	786.0	Seam "7"	RAW COAL					0.5	30.8	20.7	48.0	3,3 $\frac{1}{2}$ ,3 $\frac{1}{2}$	0.41	
			CLEAN COAL					0.4	7.5	24.3	67.8	7 $\frac{1}{2}$ ,7 $\frac{1}{2}$ ,7 $\frac{1}{2}$	0.43	65.7 % Recovery
793.7	801.0	Seam "Lower 7"	RAW COAL					0.5	33.9	21.6	54.0	5,5,5	0.66	
			CLEAN COAL					0.3	9.5	24.7	65.5	8,8,8	0.62	41.4 % Recovery

# Diamond Drill Geological Log



K-FAROEENK 70(3)A-2

Objective:

Sampled:

Logged By: D. McFARLAND

Date: July 28, 1970

Composites:

312

Block:

Sect.:

Place:

Eagle

App. Bear:

App. Dip.:

Length:

From To Discard:

Reason

0	15	No core.	Revised by radiation log
15	20	Medium to fine grain sandstone with interbedded 25% mudstone.	
20	26	Sandstone, some mudstone fractured and brecciated; dip 25 degrees.	
26	41	Sandstone, medium grain, crossbedded, dip 14 degrees (bottom set beds).	
41	42.3	Mudstone.	
42.3	44.5	Sandstone, medium grain, crossbedded.	
44.5	45.0	Mudstone, rootcast.	
45	52.5	Sandstone, interbedded mudstone, mudclast, thinly bedded.	
52.5	72.3	Sandstone; medium to coarse grain, massive, dip 31 degrees.	
72.3	76/5	Sandstone; fine grain; flaser structure.	
76.5	94.6	Sandstone; medium to coarse grain; some mud clast; dip 12 degrees.	
94.6	117.3	Sandstone, siltstone, mudstone; flaser structure, small scale folding.	
117.3	124.3	Sandstone; massive, coarse grain; mudclast, lode cast and current bedding (cross bedding) indicate that the beds have been overturned, also graded bedding - fines on bottom.	
124.3	156	Sandstone; flaser structure, dip 10 degrees.	
156	176	Sandstone; medium to coarse grain, dip 18 degrees.	
176	201.2	Mudstone; few thin sandstone beds.	
201.2	203.2	Sandstone; fine grain mudclast.	
203.2	216.2	Mudstone.	
216.2	217.2	Sandstone; fine grain, mudclast.	
217.2	236.2	Mudstone (fractured 231°).	
236.2	241.9	Sandstone; mudclast, current bedding - not overturned.	
241.9	265.4	Mudstone.	

Core Size

HQ

Hole No.

306

Page

1

40 Scale

Color Plot & Dips

Ore Classes & Aver.

# Diamond Drill Geological Log



Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

Logged By: **D. MacFARLAND** Date: **July 28, 1970** Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From	To	Discard:	Reason:
265.4	272.1	Coal.	<i>Coal 264.0 - 269.5</i>
272.1	276	Mudstone.	
276	294	Coal.	<i>274.0 - 293.0</i>
294	295	Mudstone.	
295	296	Coal.	
296	296.8	Mudstone.	
296.8	297.8	Coal.	
297.8	313.9	Mudstone, few narrow coal lenses, 0.2' to 0.5'.	
313.9	316	Siltstone and very fine grain sandstone; flaser structure.	
316	319.2	Mudstone.	
319.2	321.3	Siltstone.	
321.3	324.2	Mudstone.	
324.2	325.9	Sandstone, fine grain and siltstone; flaser structure.	
325.9	328.7	Sandstone, fine grain, interbedded siltstone and mudstone, flaser structure.	
328.7	336	Mudstone.	
336	368.7	Coal.	<i>Coal 335.0 - 366.0</i>
368.7	371.7	Mudstone.	
371.7	374	Coal.	<i>371.0 - 372.0</i>
374	375.4	Mudstone.	
375.4	383.6	Sandstone, fine grain, interbedded siltstone flaser structure.	
383.6	387	Siltstone.	
387	410	Siltstone, fine grain sandstone and mudstone, flaser structure.	
410	421	Mudstone, a few sand lenses 0.1' thick.	

Core Size

HQ

Hole No.

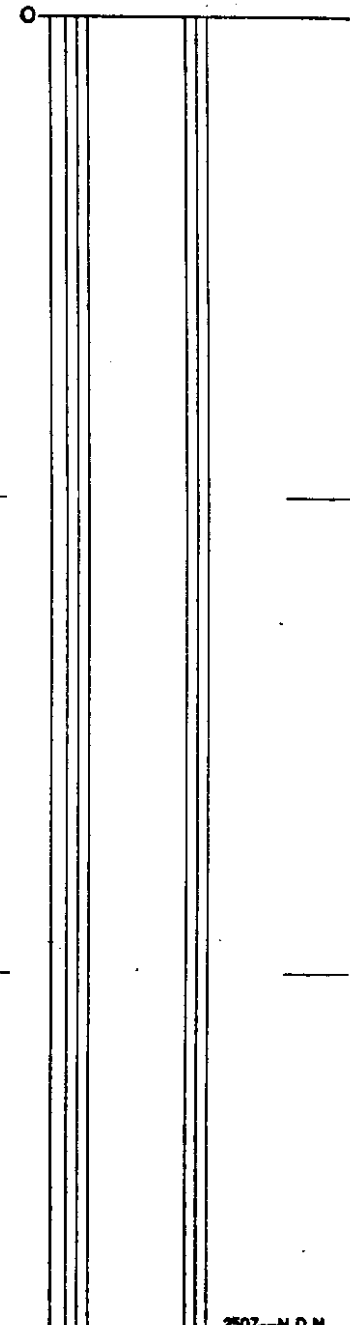
306

Page

2

40 Scale

Color Plot & Dips Ore Classes & Aver.



# Diamond Drill Geological Log



Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

Logged By: **D. MacFARLAND** Date: **July 28, 1970** Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From	To	Discard:	Reason:
421	423	Coal.	
423	448	Siltstone.	
448	460	Sandstone, fine grain interbedded siltstone; flaser structure.	
460	466	Sandstone, fine grain, massive.	
466	475	Sandstone; very fine grain, interbedded siltstone.	
475	484	Siltstone; interbedded fine grain sandstone, flaser structure.	
484	494.5	Sandstone; very fine grain to fine grain; dip 30 degrees, folding and penecontemperanous faulting 494'.	
494.5	500.6	Siltstone, some medium grain sand lenses, dip 60°, folding.	
500.6	504.4	Coal.	
504.4	513.1	Mudstone.	
513.1	573.4	Coal.	512.0 - 564.0
573.4	574.3	Mudstone.	
574.3	576	Coal.	571.0 - 572.0
576	576.4	Mudstone.	
576.4	577.8	Sandstone, medium grain.	
577.8	579.6	Siltstone.	
579.6	584.8	Sandstone, medium grain, dip 45 degrees.	
584.8	588	Siltstone and very fine grain sandstone, flaser structure.	
588	590.4	Siltstone.	
590.4	592	Sandstone, medium grain.	
592	597	Mudstone, few sand lenses near top.	
597	598.2	Sandstone; fine grain.	

Core Size: HQ  
 Hole No.: 306  
 Page: 3

40 Scale  
 Color Plot & Dips  
 Ore Classes & Aver.

# Diamond Drill Geological Log



Objective:

Sampled:

Logged By: **D. MacFARLAND**

Date: **July 31, 1970**

Composites:

Block:                      Sect.:                      Place:                      App. Bear:                      App.: Dip.:                      Length:

From	To	Discard:	Reason:
598.2	610.9		Siltstone, sandy.
610.9	612.8		Sandstone, fine grain, massive.
612.8	623		Siltstone, sandy, a few thin sandstone beds, calcite fracture filling.
623	633		Sandstone; medium grain, some interbedded mudstone $\pm$ 5%, dip 55 degrees.
633	695		Sandstone; medium to coarse grain, cross bedding (breccia at 693 to 695) dip 40°, coarse grain at base.
695	707.5		Sandstone, fine grain.
707.5	708		Mudstone.
708	708.9		Coal.
708.9	710.5		Mudstone.
710.5	719.5		Siltstone; some interbedded mudstone.
719.5	721.5		Sandstone; fine grain.
721.5	723.8		Siltstone; sandy.
723.8	731.5		Sandstone; fine grain grading to siltstone.
731.5	736.5		Siltstone.
736.5	738.8		Sandstone; fine grain; cross laminae; flaser structure - interbedded siltstone.
738.8	746		Siltstone.
746	753		Sandstone, fine grain, cross laminae, flaser structure - siltstone interbedded.
753	786		Sandstone, medium grain, cross bedded, calcite fracture filling, dip 30°.
	786		End of hole.

Core Size

HQ

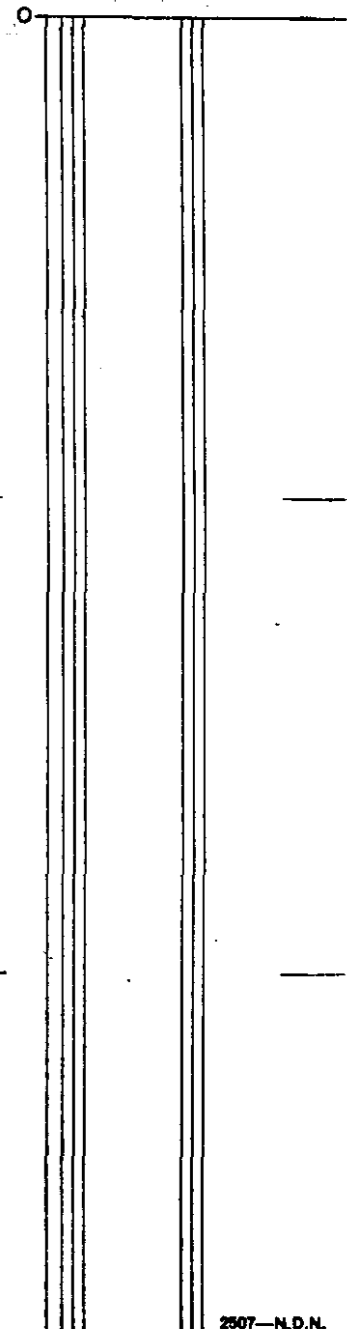
Hole No.

306

Page

4

40 Scale  
Color Plot & Dips      Ore Classes & Aver.







# Diamond Drill Geological Log



K - FORDING 70(3)A-2

Objective:

Sampled:

**312**

Logged By: \_\_\_\_\_ Date: \_\_\_\_\_

Composites:

Block:

Sect.:

Place: *Eagle*

App. Bear:

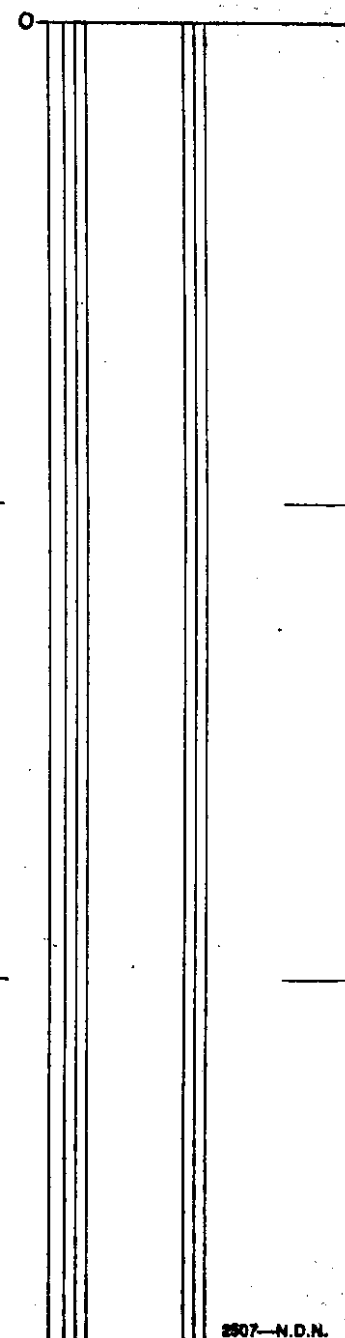
App. Dip:

Length:

From To Discard:

0	12	Overburden	<i>Revised by radiation log</i>
12	51.8	Interbedded siltstone and sandstone, flaser structure, cross bedded; dip 70° to CA.	
51.8	84.6	Coal	<i>45.0 - 80.0</i>
84.6	89	Mudstone w/ narrow vitrain and durain partings	
89	93.7	Mudstone	
93.7	94.2	Coal	
94.2	100	Siltstone	
101.3	101.5	Gouge	
101.5	108.0	Siltstone, calcareous at top	
108.0	120.0	Interbedded siltstone and sandstone, cross bedding, lodecosts, flame structure, dip 80° to CA	
120.0	122.0	Mudstone	
122.0	123.5	Coal	
123.5	127.8	Mudstone	
127.8	130.0	Coal	
130.0	131.8	Mudstone	
131.8	139	Interbedded sandstone and siltstone	
139	141	Siltstone	
141	142	Mudstone	
142	145.2	Coal	
145.2	182	Siltstone w/ a little interbedded sandstone	
182	190	Interbedded sandstone and siltstone	
190	203.5	Sandstone, medium grain, convolute bedding, <del>xxxx</del> cross bedding, dip to C.A.	
		75°	

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



Core Size

HQ

Hole No.

DDH 307

Page 1

# Diamond Drill Geological Log



Objective:			Sampled:			40 Scale		Color Plot & Dips		Ore Classes & Aver.	
Logged By:			Date:			Composites:		0			
Block:		Sect.:	Place:		App. Bear:	App. Dip.:	Length:				
From	To	Discard:		Reason:							
203.5	211.8			Interbedded siltstone and sandstone							
211.8	212.3			Mudstone, carbonaceous							
212.3	213.7			Coal							
213.7	217			Very carbonaceous mudstone w/ vitrain bands							
217	218.1			Coal		218.0 - 222.0					
218.1	221.0			Siltstone							
221.0	226.0			Coal 0.2' parting - siltstone		100% recovery					
226	226.8			Mudstone							
226.8	230			Siltstone							
230	237			Very carbonaceous mudstone and siltstone w/ vitrain bands							
237	238.5			Siltstone							
238.5	255.5			Siltstone w/ interbedded sandstone and occasional vitrain band							
255.5	257			Sandstone, medium grain, cross bedded, CaCO3							
257	263.8			Interbedded siltstone and mudstone							
263.8	265.3			Interbedded sandstone and siltstone, dip to CA=800							
265.3	266			Mudstone							
266	267			Coal							
267	270.8			Siltstone w/ interbedded sandstone							
270.8	271.8			Coal							
271.8	288.2			Mudstone w/ interbedded siltstone and a vitrain band		Core Size HQ					
288.2	290.3			Coal		289.0 - 286.0					
290.3	298.0			Siltstone		Hole No. DDH 307					
298.0	298.4			Coal		299.0 - 304.0					
							Page 2				

# Diamond Drill Geological Log



Objective:

Sampled:

Logged By:

Date:

Composites:

Block:

Sect.:

Place:

App. Bear:

App. Dip.:

Length:

From	To	Discard:	Reason:
298.4	300.0		Interbedded siltstone and sandstone
300.0	302.0		Siltstone
302.0	304.5		Coal
304.5	305		Mudstone
305	305.5		Coal
305.5	305.9		Mudstone
305.9	306.3		Coal
306.3	312.2		Mudstone
312.2	316		Sandstone, fine grain
316	321.1		Interbedded siltstone and mudstone
321.1	330.1		Coal <span style="float: right;">318.0 - 326.0</span>
330.1	341.0		Siltstone
341.0	351		Sandy siltstone w/ some interbedded sandstone
351	359		Mudstone, fractured at bottom
359	359.6		Coal <span style="float: right;">352.5 - 358.0</span>
359.6	368		Mudstone
368	371.5		Siltstone w/ some interbedded sandstone
371.5	372.0		Coal
372.0	372.5		Siltstone
372.5	374.5		Sandstone w/ interbedded sandstone
374.5	378.5		Medium grain sandstone, cross bedded
378.5	382.2		Sandy siltstone
382.2	387.0		Sandstone, very fine to fine grain, cross laminae

Core Size

HQ

Hole No. DDH 307

Page 3

40 Scale

Color Plot & Dips

Ore Classes & Aver.

# Diamond Drill Geological Log



Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

Logged By: **DM** Date: \_\_\_\_\_ Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From	To	Discard:	Reason:
387.0	393.9		Interbedded sandstone and siltstone
393.9	398.0		Siltstone
398.0	402.6		Sandstone, fine grain, cross laminae
402.6	423		Interbedded sandstone and siltstone, dip 72° to C.A.
423	428.6		Siltstone
428.6	441.5		Interbedded sandstone and siltstone, dip 62° to C.A.
441.5	454.0		Siltstone
454.0	464.0		Interbedded siltstone and sandstone
464.0	469		Mudstone
469	489		Coal; recovery 100%
489	496.2		Very carbonaceous mudstone w/ small vitrain
496.2	497		Coal
497	503		Carbonaceous mudstone w/ small vitrain bands
503	526		Siltstone
526	530		Sandst. current bedded med. grain
530	536		Mudst. interbedded with SST.
536	541		SST. Current bedded
541	554		Mudst. 80° to C.A.
554	577		Mudst. with interbedded SST. Current evidence
577	603		Mudstone
603	605.5		Very carbonaceous mudstone
605.5	619.5		Coal 100% recovery
619.5	637		SST. interbedded with mudstone. current evidence 75° to C.A.
END OF HOLE			

*Coal 464.0 - 485.0*  
*488.5 - 493.0*

*598.0 - 619.0*

Core Size

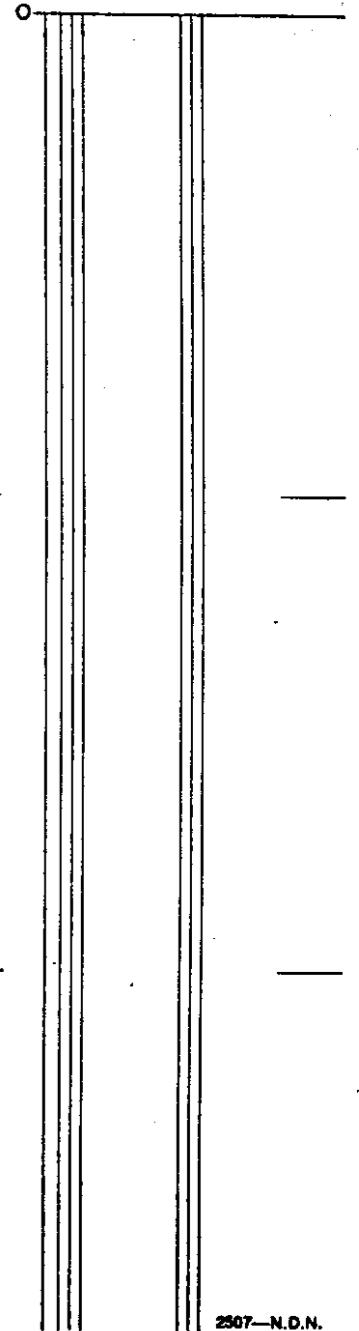
HQ

Hole No.

DDH 397

Page 4

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



FORDING OPERATIONS  
DIAMOND DRILL SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
51.8	84.6	SEAM 15				0.9	11.7	30.1	57.3	8,8,8 $\frac{1}{2}$	.33	
		CLEAN COAL				1.4	4.6	31.1	62.9	7,7,7 $\frac{1}{2}$	.42	Recovery 80.9%
469.0	489.0	SEAM 13				0.7	29.6	22.4	47.3	7 $\frac{1}{2}$ ,7,7	.49	
		CLEAN COAL				1.2	6.8	27.1	64.9	7 $\frac{1}{2}$ ,8,8	.66	Recovery 66.4%
605.5	619.5	SEAM 12				0.6	9.0	28.0	62.4	7 $\frac{1}{2}$ ,7 $\frac{1}{2}$ ,7 $\frac{1}{2}$	.71	
		CLEAN COAL				1.2	5.8	28.0	65.0	8 $\frac{1}{2}$ ,8 $\frac{1}{2}$ ,8 $\frac{1}{2}$	.69	Recovery 92.9%

# Diamond Drill Geological Log



K- FORDING 70(3)A-2

BECKER DAILY DRILL REPORT

Objective:  
 Logged By: \_\_\_\_\_ Date: September 30, 1970

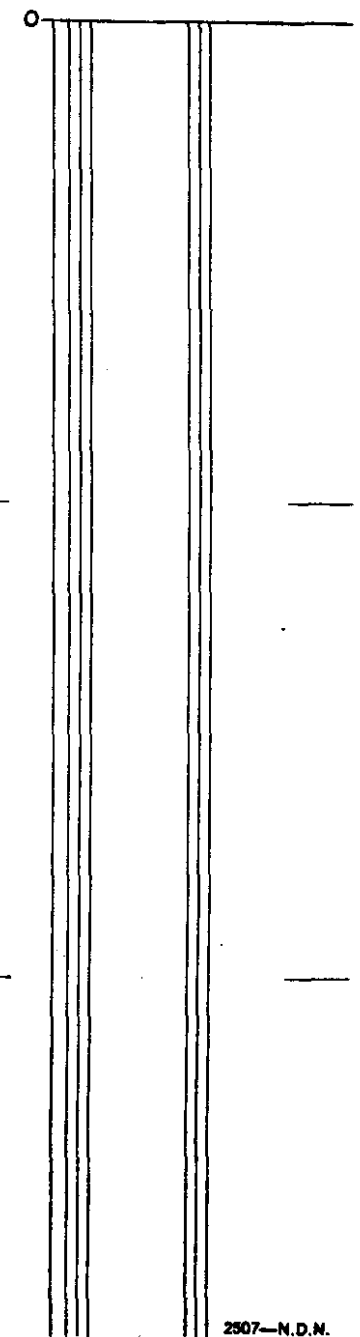
Sampled:  
 Composites: \_\_\_\_\_

312

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App.: Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From	To	Interval	Reason:
		Started September 26, 1970	
0	15	Coal	Revised by radiation log
15	30	Sandstone	
30	48	Shale	
48	83	Coal	50.0 - 84.5
83	87	Shale Coal	
87	120	Shale	
120	123	Shale Coal Stringer	
123	125	Shale	
125	126	Coal Stringer	
126	133	Shale	
133	140	Coal	132.0 - 140.0
140	161	Shale	
161	167	Sandstone	
167	170	Shale	
170	172	Sandstone	
172	180	Coal	174.0 - 178.0
180	181	Sandstone	
181	184	Bone Coal	180.0 - 185.0
184	195	Shale & Sandy Shale	
195	196	Coal	
196	209	Shale	
209	232	Sandstone	
232	236	Coal	

40 Scale  
 Color Plot & Dips  
 Ore Classes & Aver.



Core Size  
 3 7/8

Hole No. RH 308

Page 1 of 3

# Diamond Drill Geological Log



BECKER DAILY DRILL REPORT

Objective:		Sampled:		40 Scale	
Logged By:		Date:		Composites:	
Block:	Sect.:	Place:	App. Bear:	App. Dip.:	Length:
From	To	Discard:	Reason:		
236	246	Shale			
246	261	Shale			
261	266	Sandstone			
266	268	Shale			
268	269	Coal Stringer			
269	278	Shale			
278	283	Coal			
283	294	Shale			
294	315	Sandstone			
315	335	Sandstone			
335	338	Shale			
338	345	Coal			
345	375	Sandy Shale with Sandstone Layers			
375	382	Coal			
382	383	Shale			
383	385	Sandstone			
385	412	Shale			
412	435	Sandstone			
435	460	Sandstone			
460	462	Shale	Core Size		
462	474	Coal	Hole No. RH 308		
474	476	Shale			
476	480	Coal			

463.0 - 473.5

# Diamond Drill Geological Log

Becker Daily Drill Report



40 Scale  
Color Plot & Dips    Ore Classes & Aver.

Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

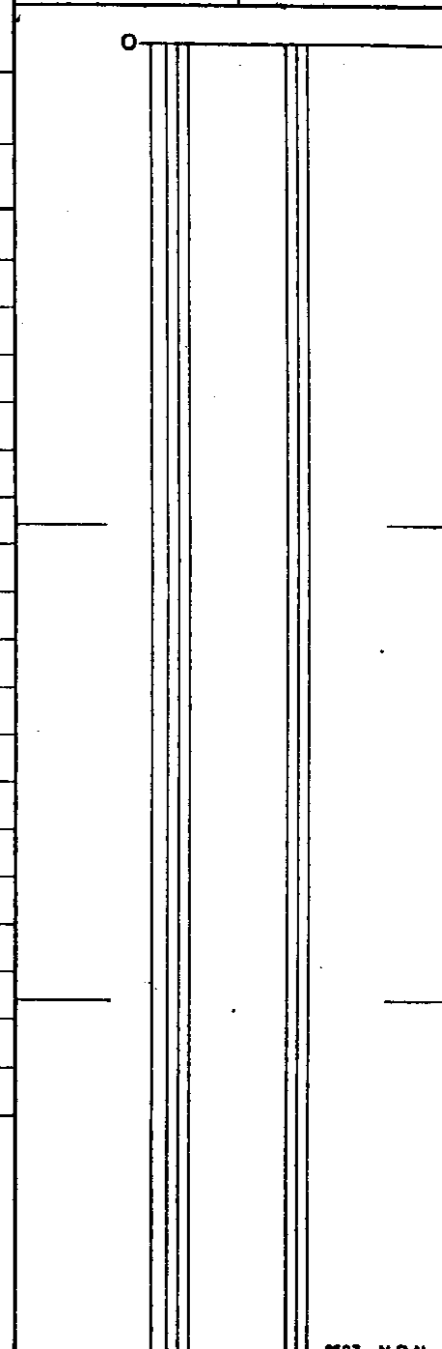
Logged By: \_\_\_\_\_ Date: \_\_\_\_\_ Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From    To    Discard:    Reason:

480	482	Shale	
482	495	Coal	484.0 - 496.0
495	497	Shale	
497	498	Shale	
498	510	HOLE COMPLETED: September 29, 1970    Sandstone	
		510 End of hole	

Core Size \_\_\_\_\_  
Hole No. RH 308    Page 3 of 3





FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
48	83	RAW COAL (SEAM 15)					0.5	13.4	31.7	54.4	8,8,8	0.38	
		CLEAN COAL					1.0	5.9	34.8	58.4	8 $\frac{1}{2}$ ,8,8 $\frac{1}{2}$	0.35	Recovery 92.0%
133	140	RAW COAL (SEAM 14 PART OF GROUP)					0.5	16.7	29.4	53.4	7 $\frac{1}{2}$ ,7 $\frac{1}{2}$ ,7 $\frac{1}{2}$	0.32	
		CLEAN COAL					1.0	6.9	31.1	61.0	8 $\frac{1}{2}$ ,8 $\frac{1}{2}$ ,8 $\frac{1}{2}$	0.80	Recovery 74.5%
172	184	RAW COAL (SEAM 14 PART OF GROUP)					0.5	31.7	25.5	42.3	7,7,7 $\frac{1}{2}$	0.68	
		CLEAN COAL					0.9	10.8	30.4	57.9	8,8,8	0.77	Recovery 72.1%
232	236	RAW COAL (SEAM 14 MINOR PART OF GROUP)					0.4	48.6	21.1	29.9	2 $\frac{1}{2}$ ,2 $\frac{1}{2}$	1.02	
278	283	CLEAN COAL											
338	345	RAW COAL (SEAM 14 LOWER PART)					0.5	41.2	22.5	35.8	4 $\frac{1}{2}$ ,4 $\frac{1}{2}$ ,5	0.52	
		CLEAN COAL					1.1	13.6	27.9	57.3	8,8,8	0.73	Recovery 47.0%
375	382	RAW COAL (MINOR SEAM)					0.6	67.4	15.1	16.9		0.44	
		CLEAN COAL					0.7	20.3	25.5	53.5	4,4 $\frac{1}{2}$ ,4 $\frac{1}{2}$	0.93	Recovery 17.6%

**FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD**

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
462	474												
476	480												
481	482	RAW COAL (SEAM 13)					0.4	34.3	23.9	41.4	7,6 $\frac{1}{2}$ ,7	0.60	Recovery 65.6%
490	496	CLEAN COAL					1.2	14.4	26.3	58.0	8 $\frac{1}{2}$ ,8 $\frac{1}{2}$ ,8 $\frac{1}{2}$	0.60	
483	490	RAW COAL (PART SEAM 13)					0.3	21.3	29.8	48.6	8,8,8	0.74	
		CLEAN COAL					0.8	10.2	28.5	60.5	9,9,9	0.78	Recovery 80.5%
48	83	RAW COAL (SEAM 15)					0.5	13.4	31.7	54.4	8,8,8	0.38	
		CLEAN COAL					1.0	5.9	34.8	58.4	8 $\frac{1}{2}$ ,8,8 $\frac{1}{2}$	0.35	Recovery 92.0%
133	140	RAW COAL (SEAM 14 PART OF GROUP)					0.5	16.7	29.4	53.4	7 $\frac{1}{2}$ ,7 $\frac{1}{2}$ ,7 $\frac{1}{2}$	0.32	
		CLEAN COAL					1.0	6.9	31.1	61.0	8 $\frac{1}{2}$ ,8 $\frac{1}{2}$ ,8 $\frac{1}{2}$	0.80	Recovery 74.5%
172	181	RAW COAL (SEAM 14 PART OF GROUP)					0.5	31.7	25.5	42.3	7,7,7 $\frac{1}{2}$	0.63	
		CLEAN COAL					0.9	10.8	30.4	57.9	8,8,8	0.77	Recovery 72.1%



# Diamond Drill Geological Log



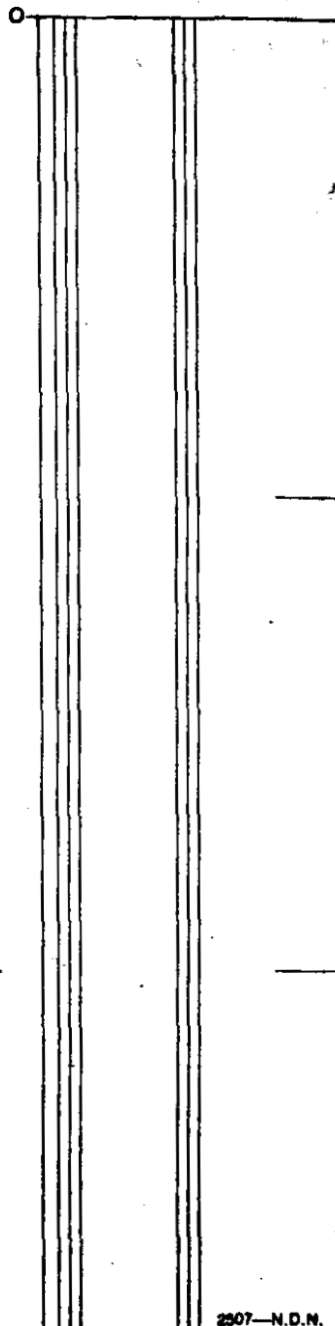
K-FOREING 70(3)A-2

312

Objective:		Sampled:	
Logged By: A.C. Taplin		Date: Sept. 21, 1970	
Block:		Composites:	
Sect.:	Place: Eagle mtn	App. Bear:	App. Dip:
Length:			

From	To	Discard:	Reason:
0	42	No Core, triconed thru' thick coal seam near surface. A few feet of overburden.	Revised by radiation log
42	59	Rusty, fract. s.s. grad. to siltstone 54-56 - rel. good recovery in broken ground to 56.0	
59	70	Md. with local thin coal bds. and seams, gen. 6" or less, broken ground, med-recovery from 70.0 good core	
70	144.5	Teb. siltstone, fine grass & mdst. interbedded. Exc. core @ 82 ft. bdg. @ 70.0 to Core axis 100° - 127° local swirly s.s. lenses, slumpage type struct.	
144.5	146.5	Coal, crushed but fair quality. Sample No. 556	
146.5	149.0	Coaly and carb. mudst. dirty coal. Sample No. 557	142.0 - 146.0
149.0	150.0	Coal, crushed good quality Sample No. 558	100% Recovery
150.0	153	Bone coal & carb. mdst.	Thruout to 159.0
153	159	Carb. mudst. & Coal Sample No. 560	151.0 - 155.0
		Mudst. 153-155; 155 - 159. Bone coal to 156.0, then flaky good coal.	
159	162.5	Mudstone	
162.5	168.0	Coal, flaky, fair qual., minor shale in box foot. 100% recov. Sample No. 561	160.0 - 164.0
168	221.5	Mudstone, dark, gen. massive. - minor coal 180-180.5 from 194 - local scattered 4"-6" sections of t.b. & lamin. H. grey S.S. @ 205 dip 55°	

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



Core Size	
Hole No.	309
Page	1

# Diamond Drill Geological Log



Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_  
 Logged By: \_\_\_\_\_ Date: \_\_\_\_\_ Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App. Dip: \_\_\_\_\_ Length: \_\_\_\_\_

From	To	Discard:	Reason:
221.5	222.5	Coal, partly shale. Not sampled	224.0 - 242.0
222.5	226.0	Sandstone, vaguely tibi, dk. molted patches; and few thin clot, vnltis.	
226.0	245.0	Coal, bright and mod. hard. NB Footage error here, @ top. Seam actually 15.5 ft.	
		100 % recovery	end at 245.0
245.0	308.0	Interbedded siltstone to figr. s.s. and 10-20% mudstone	
		x-hd. s.s. Hi grey	
		from 227 - mnly figr. s.s. @ 293 ft. dip 70°	
		290 - 297° mnly dk. mudstone few s.s. interbeds	
		304 - 305.0 fract. ground. then molst. and good core - 308.0	
308.0	330.0	Coal, good quality, flaky but excellent recovery.	304.0 - 324.0
330.0	343.5	Dark mudstone grading to f.gr. s.s.	
		343.5 End	

Core Size \_\_\_\_\_  
 Hole No. 309 Page 2

40 Scale  
 Color Plot & Dips  
 Ore Classes & Aver.

FORDING OPERATIONS  
DIAMOND DRILL SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
162.5	168.0	RAW COAL (MINOR)				1.4	16.1	28.0	54.5	7.7 $\frac{1}{2}$ .7	1.57	
		CLEAN COAL				0.6	10.6	30.3	58.6	8 $\frac{1}{2}$ , 8 $\frac{1}{2}$ , 8 $\frac{1}{2}$	1.39	Recovery 83.4%
155.0	159.0	RAW COAL (? Seam)				1.3	30.2	22.2	46.3	4 $\frac{1}{2}$ , 4, 4 $\frac{1}{2}$	0.60	
		CLEAN COAL				0.5	10.0	28.8	60.6	7 $\frac{1}{2}$ 7 $\frac{1}{2}$ 7 $\frac{1}{2}$	0.82	Recovery 62.3%

FORDING OPERATIONS

DIAMOND DRILL SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
144.5	153.0	SEAM 13				0.5	43.3	21.5	34.7	4½, 5.5	.82	
		CLEAN COAL				1.1	7.9	29.5	61.6	8½, 8½, 9	.79	Recovery 43.5%
226.0	245.0	SEAM 12				1.5	7.6	31.6	59.3	8, 8½, 8	.44	
		CLEAN COAL				1.2	4.0	32.3	62.5	8½, 8½, 8½	.38	Recovery 85.1%
308.0	330.0	UPPER 11				1.3	22.0	28.3	48.4	6½, 7, 6½	.52	
		CLEAN COAL				1.0	5.7	31.5	61.8	8, 8, 8½	.36	Recovery 66.8%

# Diamond Drill Geological Log



K-FORING 70(3)A-2

BECKER DAILY DRILL REPORT

Objective:

Sampled: **312**

Logged By: Date: October 1, 1970

Composites:

Block: Sect: Place: *Clode Creek* App. Bear: App.: Dip.: Length:

From To **Discard:** Reason: *Started: September 29, 1970 Revised by radiation log*

From	To	Discard:	Reason:
0	6	Overburden	
6	36	Sandstone	
36	65	Sandstone	
65	78	Shale	
78	118	Coal	<i>76.0 - 104.0 108.0 - 113.0</i>
118	123	Shale	
123	126	Sandy Shale	
126	132	Shale	

HOLE COMPLETED: September 30, 1970

Core Size *3 7/8*

Hole No. RH 310

Page 1 of 1

40 Scale

Color Plot & Dips Ore Classes & Aver.

0



FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
78.0	118.0	RAW COAL (SEAM 4)					0.7	18.1	19.0	62.2	5.5.5	0.36	
		CLEAN COAL					0.8	8.8	19.9	70.4	7½, 7½, 7½	0.38	Recovery 84.9%

# Diamond Drill Geological Log



K-FROING 70(3)A-2

## BECKER DRILL LOG

Objective:

Sampled: **312**

Logged By: Date: **November 30/70**

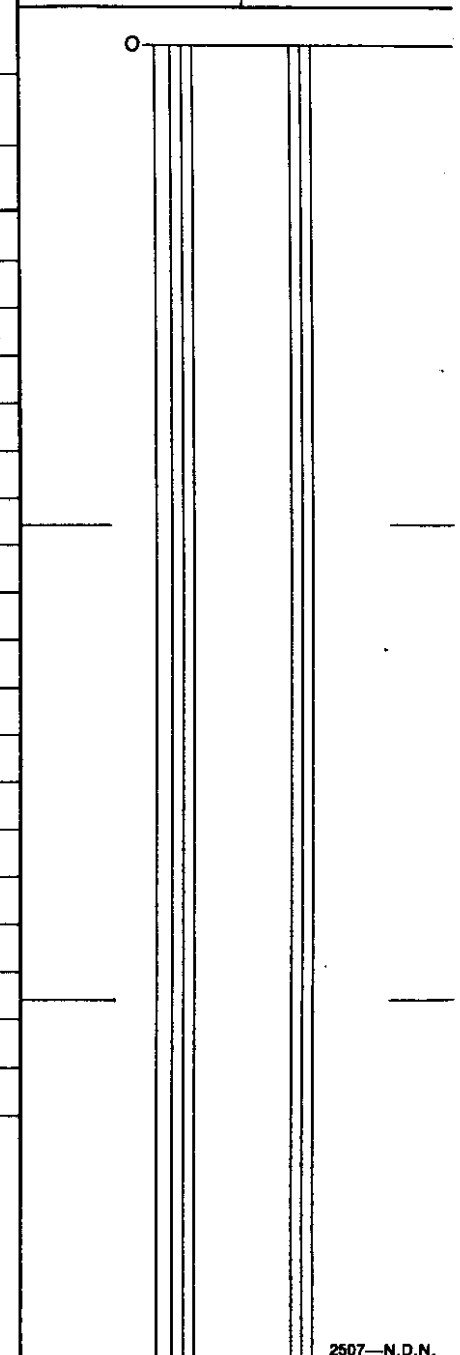
Composites:

Block: Sect.: Place: *Clode Creek* App. Bear: App.: Dip.: Length:

From To Discard: Reason: *Revised by radiation log*

0	10	Overburden	
10	39	Shale	
39	40	Coal	
40	54½	Shale	
54½	57½	Coal	
57½	63	Shale	
63	65	Sandstone	
65	68	Shale	
68	73	Coal	
73	125	Sandstone	
125	129	Shattered sandstone	
129	179	Sandstone	
179	213	Coal	<i>176.5 - 221.0</i>
213	216	Shale	
216	224	Sandstone	
224	225	Coal	
225	227	Shale	
227	234	Sandstone	
234	257	Shale	
257	272	Sandstone	
272	275	Coal	
275	481	Sandstone	Trace coal at 421½
		481' END HOLE	Dec. 12/70

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



Core Size **3 7/8"**

Hole No. **R.H. 311**

Page **1**

FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
272.0	275.0	MINOR RAW COAL					0.6	49.7	15.4	33.7	3.3,3	.55	
		CLEAN COAL					0.6	23.7	21.2	54.6	7½,8,7½	.65	Recovery 40.6%
179.0	213.0	SEAM #5 RAW COAL					0.4	23.2	20.0	56.0	3½,3½,3½	.36	
		CLEAN COAL					0.5	10.9	20.7	67.9	5,5,5	.37	Recovery 73.3%

# Diamond Drill Geological Log

K-FAOENG 70(3)A-2

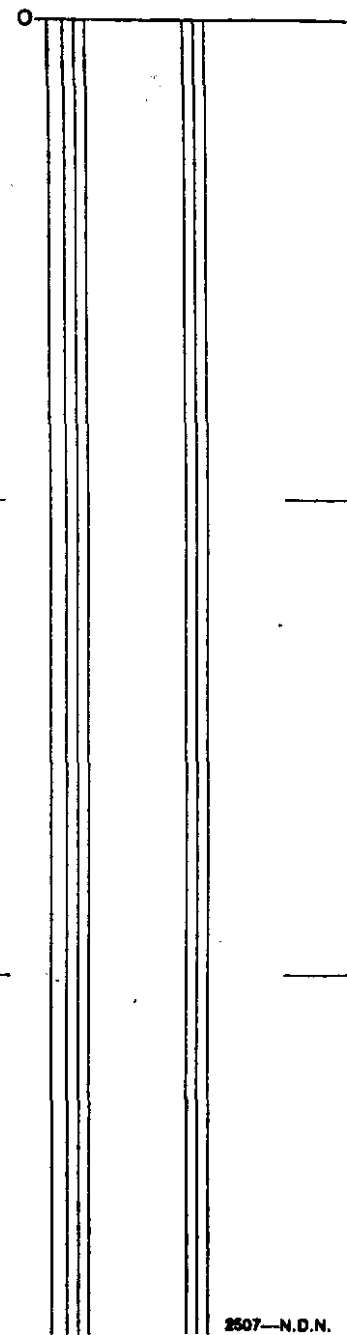
Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_ **312**

Logged By: **ACM** Date: **August 1970** Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: **Castle mtn** App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From	To	Discard:	Reason:
0	21.5	Mudst. silty from 5' to 21.5' very brecc. core	<i>Revised by Radiation log</i>
21.5	22	Narrow Coal Band	
22	25	Mudst. silty Brecc	
25	68	SST. Fine grain current bedding 45° to C.A. Core is Brecc. at several narrow horizons.	
68	154.5	SST. Light coloured hard medium grained 50° to C.A. at 124' 2' of Brecc. mudst. Throughout this unit there are several fracture zones, some rusty. Towards base unit contains several narrow vitrain bands.	
154.5	162.5	Mudst. Fractured at 159'	
162.5	177.4	SST. Coarse Grained bedded 90° to C.A.	
177.4	217	Mudst. carbonaceous	
217	219	Mudst. silty current bedding, 20° to C.A.	
219	239.5	Mudst	
239.5	242.9	Sandstone, fine grain, lodecast, thinly bedded, X-bedded	
242.9	250.4	Mudstone and siltstone - interbedded	
250.4	256	Sandstone, fine grain, lodecast, cross stratified, flaser structure	
256	265.2	Siltstone	
265.2	272	Sandstone, fine grain and cross laminated	
272	287.1	Siltstone	
287.1	290.3	Mudstone	
290.3	292	Coal	
292	295	Mudstone	
295	295.5	Coal <i>298.0 - 312.0</i>	
295.5	304.5	Carbonaceous mudstone	
304.5	312.4	Coal - high ash - shaley	

40 Scale  
Solar Plot & Dips  
Ore Classes & Aver.



Core Size \_\_\_\_\_  
Hole No. **400** Page **1**

# Diamond Drill Geological Log



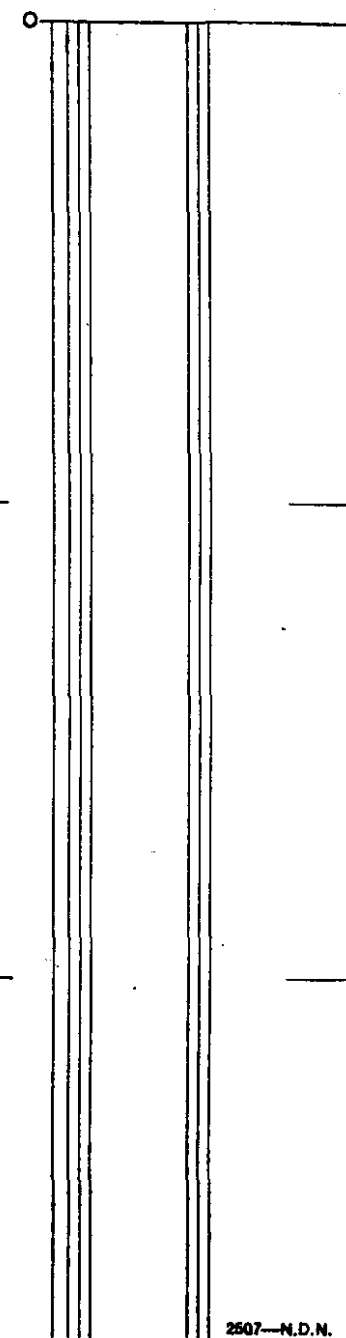
Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

Logged By: \_\_\_\_\_ Date: \_\_\_\_\_ Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From	To	Discard:	Reason:
312.4	314.6	Mudstone	
314.6	339.4	Siltstone	
339.4	340.0	Coal	
340.4	344.0	Siltstone	
344.0	344.2	Coal	
344.2	357	Siltstone	
357	368	Carbonaceous mudstone	
368	375.8	Mudstone	
375.8	389	Siltstone	
389	394.8	Sandstone and siltstone, convolute bedding, fine grain sandstone dip 6° to C.A.	
394.8	499	Siltstone	
499	512	Coal	494.0 - 510.0
512	532.5	Fine grain sandstone and siltstone, flaser structure dip 65° to C.A.	
532.5	537	Siltstone and mudstone	
537	553.1	Coal	533.0 - 549.0
553.1	571	Mudstone, carbonaceous near seam	
571	574.6	Sandstone, fine to very fine grain	
574.6	578.2	Siltstone	
578.2	581.2	Sandstone, fine to med. grain, thin bedded, dip 70° to C.A.	
581.2	588	Mudstone, siltstone	
588	589	Sandstone, medium grain	
589	600	Siltstone with interbedded fine grain sandstone dip 60° to C.A.	
600	608	Sandstone, medium grain, cross bedded little interbedded siltstone - flaser structure, dip 63° to C.A.	

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



Core Size  
HQ  
Hole No. 400  
Page 2

# Diamond Drill Geological Log



Objective:

Sampled:

Logged By:

Date:

Composites:

Block:

Sect.:

Place:

App. Bear:

App. Dip.:

Length:

From To Discard Reason:

608	609.5		Sandstone, medium to coarse grain
609.5	610.6		Siltstone
610.6	738.2		Sandstone, medium grain, dip 45° to C.A. to 30° to C.A. grain size grading to coarse grain
738.2	744		Fault, coal 0.2, mudstone, gouge and breccia
744	750.7		Mudstone
750.7	751.3		Coal
751.3	765.7		Mudstone
765.7	771.7		Slicken sided coal, bone coal, mudstone and coal breccia - high ash coal - sampled
771.7	773.6		Siltstone
773.6	774.7		Coal sheared, high ash
774.7	781.6		Mudstone
781.6	782.3	778.0 - 786.0	Coal
782.3	785.0		Mudstone breccia
785.0	795.0		Coal
795	804		Mudstone
804	807		Siltstone and sandstone, flaser structure, dip 60° to C.A.

807.0 End

Core Size

Hole No.

400

Page

3

40 Scale

Color Plot & Dips

Ore Classes & Aver.

FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
298	312	Seam "7"?					0.5	20.8	21.0	77.7	4,4,3½	0.52	
		CLEAN COAL					0.4	7.4	21.8	70.4	6,6,6	0.63	61.2 % Recovery
495	510	Seam "5"					0.5	20.3	17.6	61.6	5,4½,4½	0.49	
		CLEAN COAL					0.7	7.0	20.3	72.0	4,3½,3½	0.48	86.3 % Recovery
533	549	Seam "5 faulted"					0.5	11.8	19.0	68.7	4,4,4	0.58	
		CLEAN COAL					0.8	8.0	22.1	69.1	4,3½,3½	0.57	90.4 % Recovery
779	786	Seam "4"					0.8	54.3	13.5	31.4	2,2,1½	0.36	
		CLEAN COAL					0.6	10.1	21.5	67.8	9,9,9	0.70	24.4 % Recovery
765.7	771.7	Seam "Part of 4"					N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
		CLEAN COAL					0.8	4.6	23.2	71.3	8½,8½,8½	0.70	45.5 % Recovery

# Diamond Drill Geological Log



K-FORING 70(3)A-2

Objective:

Sampled:

312

Logged By:

Date:

Composites:

Block:

Sect.:

Place: Castle mtn

App. Bear:

App. Dip:

Length:

From To

Discard:

Reason: Revised by radiation log.

0	17	Overburden
17	25	Mudstone
25	25.5	Coal
25.5	29	Mudstone
29	34	Siltstone
34	35	Sandstone, fine grain, cross bedded
35	44	Siltstone
44	46.3	Mudstone
46.3	47.0	Coal
47.0	49.9	Siltstone
49.9	50.5	Coal
50.5	53.5	Mudstone
53.5	56	Sandstone, fine grain, cross bedded
56	58.1	Fault breccia - siltstone and sandy siltstone
58.1	58.9	Coal
58.9	61.8	Mudstone, carbonaceous near coal
61.8	65.0	Sandstone with interbedded siltstone, cross bedded, dip to C.A. 75°
65.0	67.0	Mudstone
67.0	72	Siltstone and interbedded sandstone, flaser structure
72	80	Siltstone
80	82	Sandstone with interbedded siltstone, cross bedded
82	84.3	Siltstone
84.3	91.6	Sandstone fine grain, cross bedded, inter bedded siltstone Flaser structure

Core Size

HQ

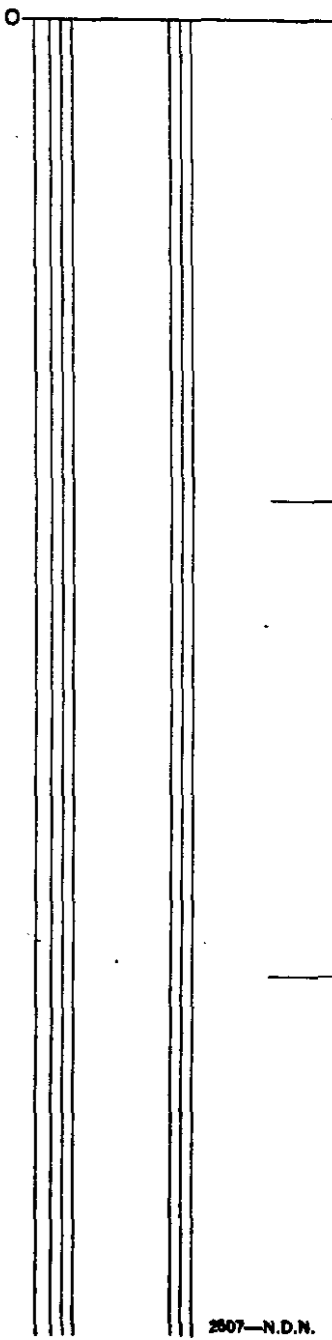
Hole No.

DDH 401

Page

1

40 Scale  
Color Plat & Dips  
Ore Classes & Aver.





# Diamond Drill Geological Log



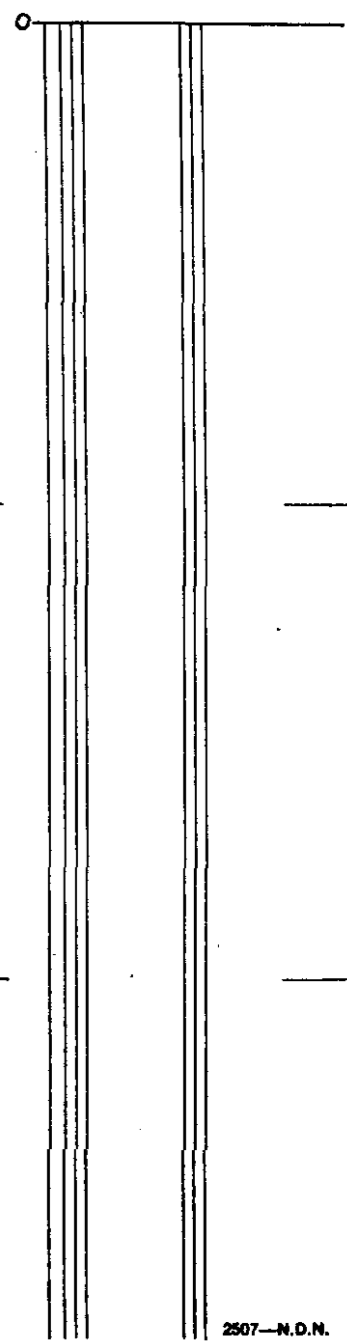
Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_  
 Logged By: \_\_\_\_\_ Date: \_\_\_\_\_ Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App.: Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From	To	Discard:	Reason:
91.6	97.5		Siltstone
97.5	107		Interbedded fine grain sandstone and siltstone
107	109.7		Siltstone and mudstone
109.7	111.7		Coal <i>114.0 - 119.0</i>
111.7	115		Mudstone
115	134.4		Coal, a few small mudstone partings, 1% pyrite <i>124.0 - 132.0</i>
134.4	137		Inter bedded sandstone and siltstone
137	141.4		Siltstone
141.4	149.7		Siltstone with interbedded fine grain sandstone, flaser structure
149.7	180.3		Siltstone
180.3	194.8		Interbedded siltstone and sandstone, flaser structure
194.8	221		Sandstone, medium grain to coarse grain, cross bedded, mudclast, coalified material
221	228		Thick to thin interbedds of medium grain sandstone and siltstone mudclast
228	260.6		Sandstone, medium grain to coarse grain, mudclast, dip to C.A. 61°
260.6	273		Interbedded fine grain sandstone and siltstone, mudclast, flaser structure
273	303		Sandstone, coarse grain, cross bedded, mudclast
303	311.5		Siltstone, W/small coal parting
311.5	323		Interbedded siltstone and sandstone, mostly sandstone in center
323	327.2		Mudstone <i>323.0 - 326.0</i>
327.2	330.3		Coal
330.3	334.0		Mudstone
334.0	363.0		Coal <i>332.0 - 358.0</i>
363.0	363.9		Mudstone <i>362.0 - 368.0</i>

Core Size  
 HQ  
 Hole No. DDH 401  
 Page 2

40 Scale  
 Color Plot & Dips  
 Ore Classes & Aver.



# Diamond Drill Geological Log



Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

Logged By: \_\_\_\_\_ Date: \_\_\_\_\_ Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From	To	Discard:	Reason:
363.9	372	Coal	
372	384.5	Mudstone and siltstone	
384.5	400.2	Sandstone, fine grain, massive to laminated	
400.2	421	Siltstone and sandy siltstone, some flaser structure	
421	447	Mudstone and carbonaceous mudstone	
447	454	Siltstone	
454	459	Siltstone and interbedded sandstone, flaser structure	
459	460	Mudstone	
460	461.2	Very carbonaceous mudstone, bone coal and vitrain bands	
461.2	462	Coal	
462	477	Carbonaceous mudstone w/vitrain bands	
477	480.1	Siltstone	
480.1	487.8	Siltstone, sandy siltstone, sandstone, flaser structure	
487.8	489.3	Mudstone, carbonaceous	
489.3		Sandstone, fine grain cross bedded, interbedded siltstone, flaser structure, dip 65° to C.A.	
523	532	Coal	518.0 - 525.0
530	542	Mudstone one foot coal at 534'	
542	600	SST fine to medium grain with several mudstone horizons; 70° to C.A.	
600	615	SST. Coarse grain current bedding 602' - 603' Brecc. zone	
615	626	Mudst. alternating w. fine grain current SST.	
626	630.7	Coal with 2 narrow shale partings	622.0 - 628.0
630.7	636	SST fine grain with mudstone	632.0 - 642.0
636	659	Coal with partings at 640' - 641.5', and 647' to 650.5'	644.0 - 654.0

Core Size  
HQ

Hole No. DDH 401

Page 3

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.

# Diamond Drill Geological Log



40 Scale  
Color Plot & Dips    Ore Classes & Aver.

Objective:

Sampled:

Logged By:

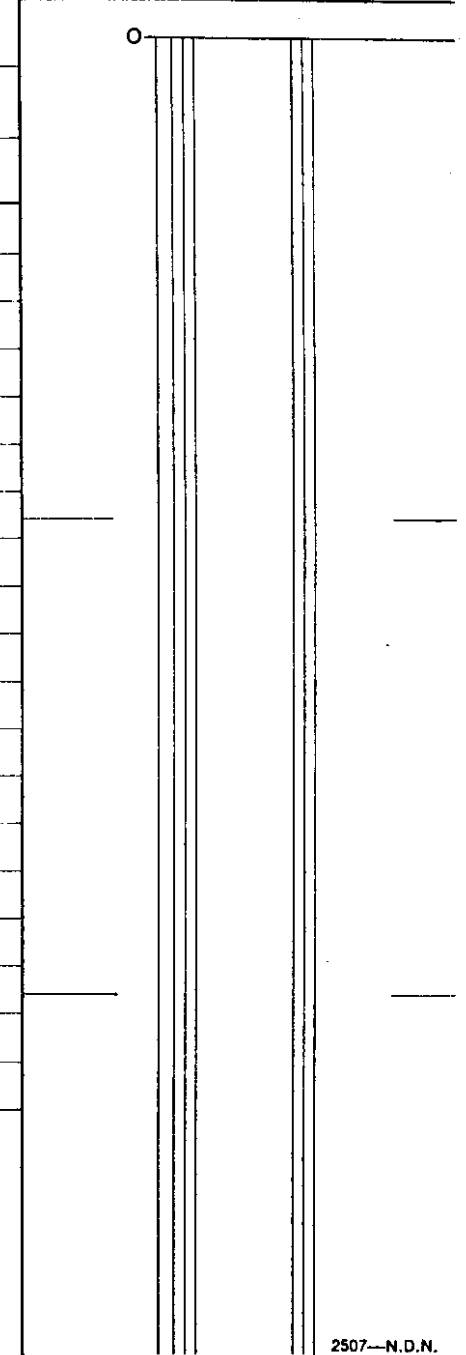
Date:

Composites:

Block:                      Sect.:                      Place:                      App. Bear:                      App.: Dip.:                      Length:

From    To    Discard:                      Reason:

659	678.5	Mudst	
678.5	681	Dirty Coal	673.0 - 677.0
681	715	Mudst. alternating with fine grain SST. 65° to C.A.	704' - 705' fractured SST with pyrites and calcite of fracture planes
715	760.9	SST med. grained grading into mudstone towards bottom of unit	
760.9	776.5	Coal good undisturbed,	772 - 773.5 shale parting 756.0 - 772.0
776.5	802	Mudst.	



Core Size  
HQ

Hole No.                      Page  
DDH 401                      4

FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	TS	FC	FSI	S	REMARKS		
114	119	Seam "11" RAW COAL					0.7	52.7	18.8	47.8	1½, 1½, 1½	0.63	
124	133	CLEAN COAL					1.1	8.8	22.8	67.3	3, 3, 3	0.79	48.3 % Recovery
323	326	Seam "11" RAW COAL					0.6	34.9	19.8	44.7	3, 2½, 3	0.36	
332	357	CLEAN COAL					0.8	7.8	24.0	67.5	7½, 8, 8	0.56	
362	368												65.2 % Recovery
318	326	Seam "9" RAW COAL					0.4	25.3	21.6	52.7	5, 5, 5	0.60	
		CLEAN COAL					1.0	7.5	22.8	68.8	9, 9, 9	0.71	47.1 % Recovery
622	628	Seam "7" RAW COAL					0.6	39.4	16.8	43.2	1, 1½, 1½	0.41	
632	642	CLEAN COAL					0.7	9.4	21.0	68.7	7, 7½, 7	0.59	
644	655												40.2 % Recovery
756	773	Seam "5" RAW COAL					0.5	29.4	17.7	52.4	2½, 2½, 2½	0.41	
		CLEAN COAL					0.7	8.3	21.2	69.8	6, 6, 6	0.46	72.6 % Recovery

# Diamond Drill Geological Log

BECKER DRILL LOG



K-FEEDING 70(3)A-2

Objective:

Sampled: **312**

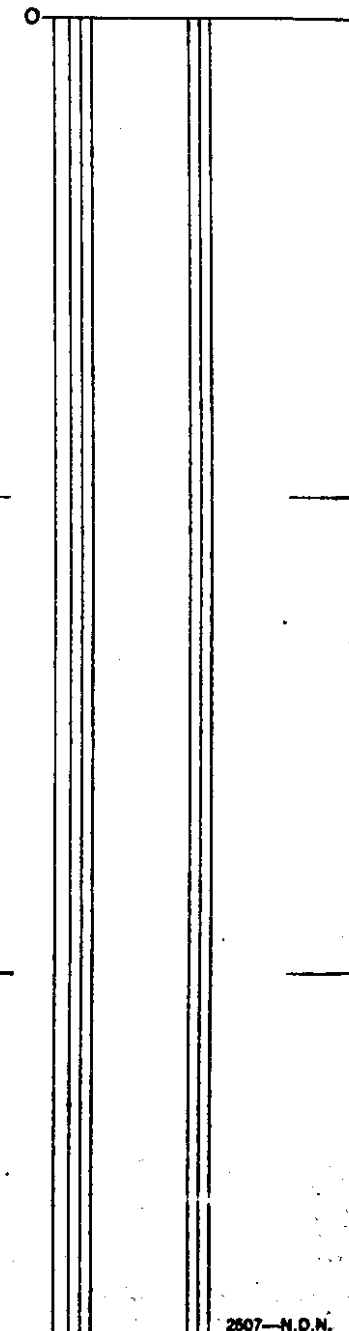
Logged By: Date: August 29/70

Composites:

Block: Sect.: Place: App. Bear: App. Dip: Length:  
 CASTLE MTN.

From	To	Discard:	Reason:
0	12	Overburden	<i>Revised by radiation log</i>
12	46	Mudstone (Carbonaceous from 37.5 to 38) Brecciated	
46	55½	Siltstone	
55½	61½	Sandstone, fine grain, massive, dip to c.a. 75°	
61½	64.4	Mudstone	
64.4	64.6	Coal	
64.6	66.7	Siltstone	
66.7	67.8	Sandstone, fine grain, thinbedded, cross stratified, dip to c.a. = 62°	
67.8	74.4	Mudstone and siltstone	
74.4	75.0	Bone Coal	
75.0	76.3	Siltstone	
76.3	78.0	Sandstone, fine grain thinly bedded, dip to c.a. = 70°	
78.0	87.6	Siltstone	
87.6	89.4	Sandstone, fine grain, cross stratified	
89.4	100	Siltstone and sandstone, flaser structure	
100	100.5	Fault gauge, some coal, mostly clay	
100.5	108.5	Mudstone, somewhat carbonaceous, vitrain and clarain partings up to 0.2 thick	
108.5	109.0	Coal	
109.0	110.0	Mudstone	
110.0	111.5	Coal, brecciated	
111.5	112.1	Mudstone	
112.1	112.5	Coal	
112.5	122.0	Mudstone carbonaceous w/vitrain bands	

40 Scale  
 Color Plot & Dips  
 Ore Classes & Aver.



Core Size H. Q.

Hole No. DDH.402

Page 1

# Diamond Drill Geological Log



40 Scale

Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_  
 Logged By: \_\_\_\_\_ Date: \_\_\_\_\_ Composites: \_\_\_\_\_  
 Color Plot & Dips \_\_\_\_\_ Ore Classes & Aver. \_\_\_\_\_

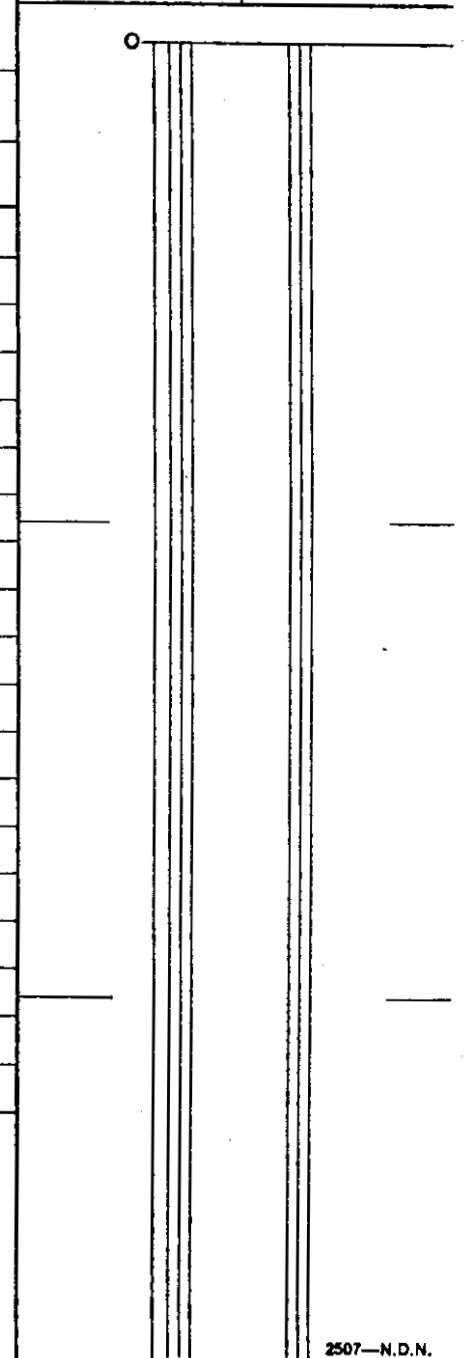
Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App.: Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From	To	Discard:	Reason:
122.0	130.0	Siltstone	
130.0	136.6	Siltstone and sandstone, flaser structure	
136.6	139.0	Sandstone, fine grain, cross stratified	
139.0	182.5	Interbedded fine grain sandstone and siltstone, flaser structure, dip to c.a. = 66°	
182.5	194.0	Sandstone, fine to medium grain, cross stratified, massive	
194.0	214.5	Sandstone interbedded siltstone, flaser structure	
214.5	214.8	Carbonaceous mudstone	
214.8	221.8	Coal	213.0 - 218.0
221.8	233.7	Carbonaceous mudstone	
233.7	243.2	Interbedded, siltstone and sandstone, flaser structure	dip to ca = 75°
243.2	256	Sandstone coarse to fine grain	dip to ca = 65°
256	261	Interbedded sandstone and siltstone	
261	295.2	Siltstone	
295.2	321	Interbedded sandstone and siltstone, flaser structure	dip to ca - 75°
321	321.3	Mudstone	
321.3	323	Coal	320.0 - 325.0
323	324.8	Mudstone	
324.8	326.9	Coal	331.5 - 334.0
326.9	330	Siltstone	
330	331	Coal	
331	333	Mudstone	
333	336	Coal	336.0 - 344.0
336	338	Mudstone	

Core Size H.Q.

Hole No. DDH.402

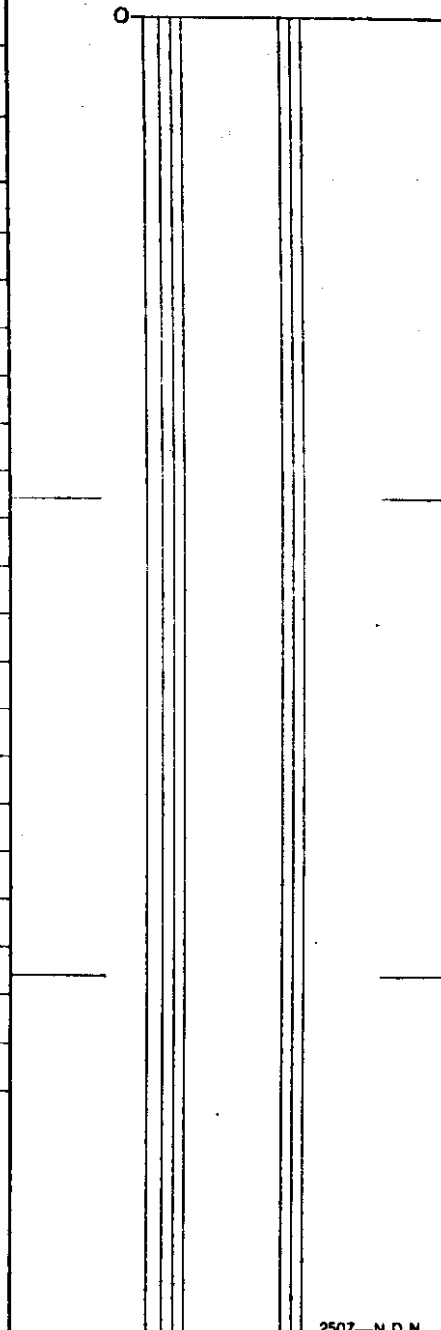
Page 2



# Diamond Drill Geological Log



Objective:			Sampled:			40 Scale	
Logged By:			Date:			Color Plot & Dips	
Block:			Composites:			Ore Classes & Aver.	
Sect.:		Place:		App. Bear:		App. Dip.:	
						Length:	
From	To	Discard:		Reason:			
338.0	348.0	Coal		358.0 - 362.0			
348.0	364.0	Siltstone and mudstone w/vitrain bands up to 1.0 thick		361.5 - 362.5			
364.0	371.0	Interbedded siltstone, mudstone and sandstone					
371.0	374.7	Mudstone					
374.7	375.4	Interbedded siltstone and sandstone					
375.4	382.5	Mudstone					
382.5	393.0	Interbedded siltstone and sandstone					
393.0	400.0	Sandstone medium grain cross bedded, dip to ca = 77°					
				400.0' END HOLE			
						Core Size H.Q.	
						Hole No. DDH. 402	
						Page 3	



FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
214.8	221.8	RAW COAL (SEAM 9)?					0.2	27.9	20.9	51.0	5½, 5.5, 5½	0.74	
		CLEAN COAL					0.4	10.8	22.6	66.3	8, 8, 8	0.79	Recovery 58.5%
321.3	326.9	RAW COAL (SEAM 7)					0.2	47.4	16.3	36.1	1½, 1½, 1½	0.41	
		CLEAN COAL					0.4	11.1	21.5	67.4	7, 7, 7	0.77	Recovery 39.0%



# Diamond Drill Geological Log



K-FORDING 70(3)A-2

Objective:		Sampled:	
Logged By: <b>D.M.</b>		Date: <b>Aug. 1970</b>	
Block:		Composites:	

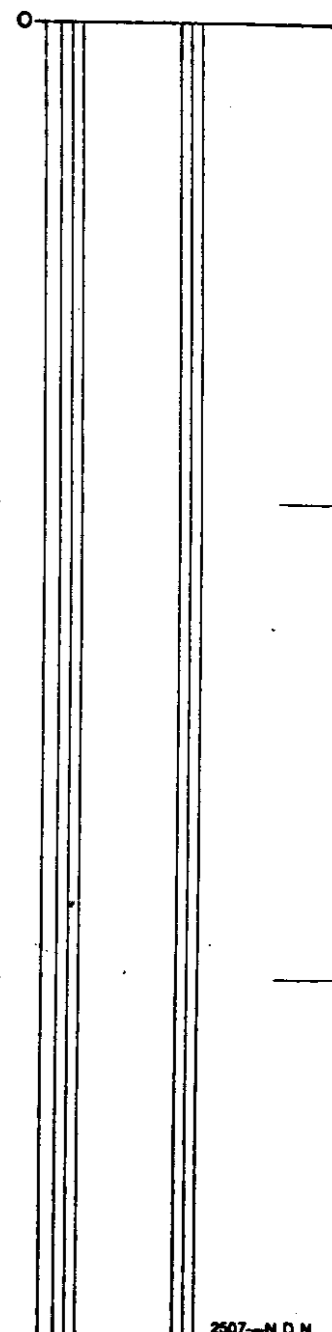
312

Sect.:		Place: <i>Green hills</i>		App. Bear:		App.: Dip.:		Length:	
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From	To	Discard:	Reason:
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0	12	Overburden	
12	39	Sandstone, medium to fine grain, mudclast, cross bedding some interbedded siltstone near bottom	
39	46.5	Siltstone	
46.5	48.0	Coal	
48.0	57.3	Siltstone and mudstone	
57.3	59.6	Coal	
59.6	66	Carbonaceous Mudstone	
66	99	Sandstone with interbedded siltstone, some cross bedding and convolute beds	
99	110.5	Siltstone	
110.5	130	Siltstone with interbedded sandstone; flaser structure	
130	141	Sandstone, fine grain, cross bedded, dip 55° to C.A.	
141	150.7	Siltstone, sandy	
150.7	159.8	Fine grain sandstone with interbedded siltstone, cross bedding	
159.8	174.5	Siltstone	
174.5	213	Sandstone, fine grain convolute bedding, flame structure, flaser structure dip 50° to C.A.	
213	223.0	Siltstone	
223.0	226.6	Mudstone	
226.6	234.3	Coal	<i>224.0 - 246.0 parting 33.0 - 34.0</i>
234.3	235.4	Mudstone	
235.4	249.6	Coal	
249.6	251.6	Fault Gouge	
251.6	252.3	Coal - sheared	
252.3	255	Breccia - sandstone	

40 Scale
Color Plot & Dips
Ore Classes & Aver.



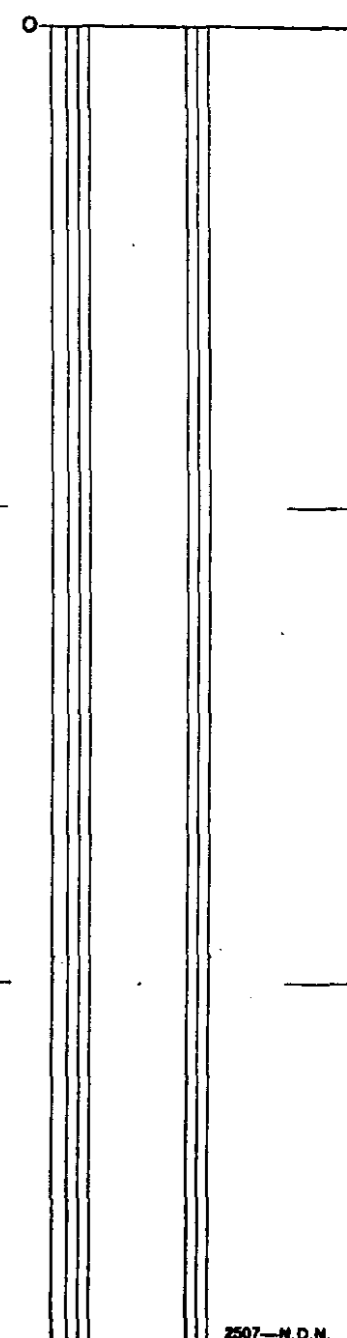
Core Size	
Hole No.	DDH 500
Page	1

# Diamond Drill Geological Log



Objective:		Sampled:		40 Scale	
Logged By:		Date: <b>Aug. 17, 1970</b>		Composites:	
Block:	Sect.:	Place:	App. Bear:	App.: Dip.:	Length:
From	To	Discard: Reason:			
255	263.8	Fractured and brecciated siltstone and mudstone			
263.8	266.3	Sandstone, fine grain			
266.3	276.5	Siltstone, fractured and brecciated			
276.5	285	Sandstone, fine grain, thin bedded, flaser structure, dip 55° CA Fractured and brecciated			
285	294.3	Siltstone and mudstone, fractured and brecciated			
294.3	296.0	Coal <span style="margin-left: 100px;">294.0 - 304.0</span>			
296.0	298.5	Sandstone and siltstone, flaser structure			
298.5	308.6	Coal 0.3 parting			
308.6	348.6	Sandstone and siltstone, flaser structure, dip 55° to C.A.			
348.6	353.7	Siltstone and sandy siltstone			
353.7	358.5	Fine grain sandstone and siltstone, flaser structure dip 40° to C.A.			
358.5	361.0	Siltstone			
361.0	366	Sandstone, siltstone, flaser structure			
364.2	369	Coal <span style="margin-left: 100px;">361.0 - 390.0</span>			
369	374.6	Sandstone, fine to medium grain			
374.6	393.8	Coal			
393.8	411.5	Mudstone and siltstone, a few vitrain bands			
411.5	414.5	Siltstone and fine grain sandstone; flaser structure; dip 50° to CA			
414.5	418	Carbonaceous mudstone			
418	422	Sandstone and siltstone, flaser structure			
422	436.7	Sandstone, medium grain, thinly bedded, dip 50° to CA			
436.7	447.6	Siltstone			
447.6	449.3	Sandstone, fine grain to medium grain, cross bedded, interbedded			

Color Plot & Dips      Ore Classes & Aver.



Core Size  
 HQ  
 Hole No.      DDH 500      Page 2

# Diamond Drill Geological Log



Objective:		Sampled:		40 Scale	
Logged By:		Date:		Color Plot & Dips	
Block:		Place:		Ore Classes & Aver.	
Sect.:		Composites:			
App. Bear:		App. Dip.:		Length:	
From	To	Discard:	Reason:		
449.3	462.0	Siltstone, lodecast; flaser structure		456.0 - 459.0	
462.0	465.3	Bone coal, breccia			
465.3	471.3	Sandstone, medium grain, thinly bedded, dip 30° to C.A.			
471.3	481.5	Mudstone, highly fractured near bottom			
481.5	489.6	Coal		474.0 - 489.0	
489.6	490.5	Mudstone			
490.5	496.4	Coal			
496.4	498.0	Mudstone			
498.0	498.2	Coal			
498.2	510.0	Sandstone, fine grain, some interbedded siltstone			
510	513.0	Siltstone			
513.0	515.0	Coal			
515.0	546.7	Siltstone and sandy siltstone			
546.7	557.2	Sandstone, fine to medium grain, thinly bedded, some small scale cross bedding, a few mudclast and thin Siltstone interbeds; dip 80° to C.A.			
557.2	576.0	Sandstone, coarse grain, thin to thick - massive beds with depth, dip 67° to C.A.			
		576.0 End			
				Core Size	
				HQ	
				Hole No. 500	
				Page 3	

FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
361	390	Seam "Upper G" RAW COAL					0.8	25.8	23.0	50.4	6, 6 1/2	0.79	
		CLEAN COAL					0.65	7.9	28.0	63.3	8 1/2, 8 1/2	0.84	73.5 % Recovery
224	246	Seam "Upper & Lower H" RAW COAL KXKX					0.9	20.9	25.4	52.8	8, 8, 8	0.69	
294	304	CLEAN COAL					0.99	6.7	28.4	63.9	8, 8, 8	0.62	71.9 % Recovery

FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
481.5	496.4	RAW COAL (SEAM LOWER G)					0.6	42.4	25.2	31.8	3.3 <sup>1</sup> / <sub>2</sub> , 3 <sup>1</sup> / <sub>2</sub>	1.5	
		CLEAN COAL					0.7	7.9	26.1	65.3	8,8,8	1.0	Recovery 26.8%

# Diamond Drill Geological Log



K-FORING 70(3)A-2

Objective: \_\_\_\_\_ Sampled: **312** Color Plot & Dips \_\_\_\_\_ Ore Classes & Aver. \_\_\_\_\_

Logged By: \_\_\_\_\_ Date: \_\_\_\_\_ Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: *Green hills* App. Bear: \_\_\_\_\_ App. Dip: \_\_\_\_\_ Length: \_\_\_\_\_

From	To	Discard:	Reason:
0	10		<i>Revised by radiation log</i>
10	16		Fine grain sandstone with interbedded siltstone, flaser structure
16	17		Mudstone
17	18.5		Coal <i>12.0 - 16.0</i>
18.5	20.0		Very carbonaceous mudstone (bone coal)
20	21		Mudstone
21	21.5		Very silicified or "cherty" mudstone
21.5	34.6		Mudstone
34.6	38.0		Coal <i>32.6 - 36.0</i>
38.0	38.8		Mudstone
38.8	40.6		Coal with numerous small mudstone partings
40.6	42		Mudstone with vitrain bands
42	55.7		Sandy siltstone with thin interbeds of sandstone grading to a fine grain sandstone, flaser structure
55.7	58.7		Sandstone, fine grain, cross bedded, dip 60° to C.A.
58.7	63.0		Siltstone, flaser structure
63.0	71.0		Mudstone
71.0	73.0		Siltstone
73.0	77.7		Mudstone, and carbonaceous mudstone with vitrain bands.
77.7	121		Coal <i>74.0 - 118.0</i>
121	150		Mudstone; 136' - 138' - 144' - Breccia
150	166		Coal <i>146.0 - 160.0</i>
166	167.5		Very carbonaceous shale with vitrain bands - bone coal
167.5	175.5		Mudstone
175.5	177.0		Coal <i>172.0 - 178.0</i>

Core Size

HQ

Hole No.

DDH 501

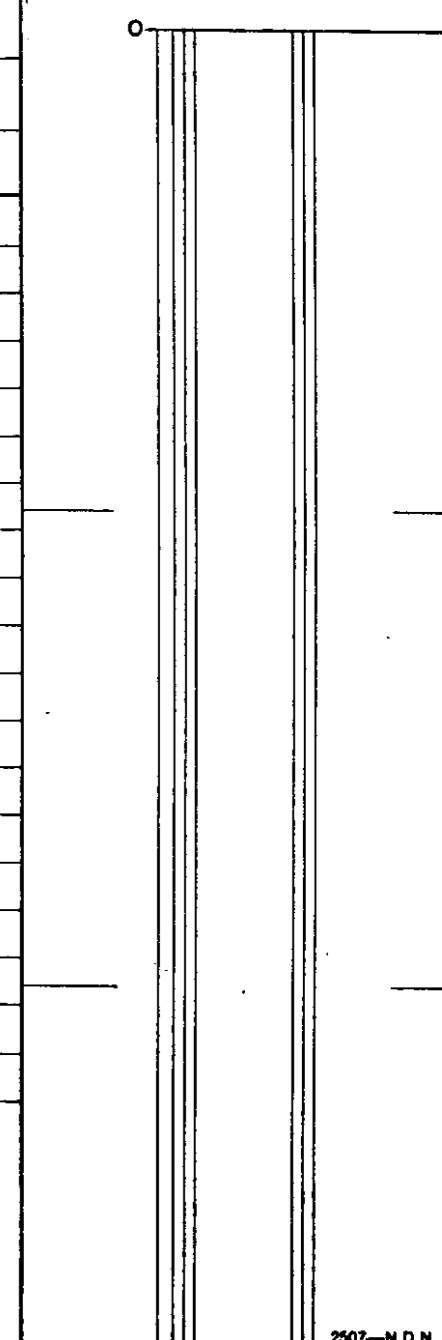
Page

1

# Diamond Drill Geological Log



Objective:							40 Scale	
Logged By:				Date:			Composites:	
Block:		Sect.:	Place:		App. Bear:	App. Dip.:	Length:	
From	To	Discard:		Reason:				
177.0	177.8	Very carbonaceous shale - fusain in part						
177.8	181.5	Coal						
181.5	186	Mudstone, brecciated						
186	187	Coal						
187	206.5	Mudstone						
206.5	217.5	Siltstone and sandstone; flaser structure, dip 73° to C.A.		Small scale cross bedding				
217.5	241.1	Sandstone; fine grain, cross bedded, dip 75° to C.A.						
241.1	244	Siltstone, flaser structure						
244	247	Mudstone						
247	254	Coal		245.0 - 247.0		250.0 - 252.0		
254	258	Mudstone						
258	265.2	Coal		256.0 - 260.0				
265.2	267	Siltstone, sandstone, flaser structure						
267	269.4	Siltstone						
269.4	273	Sandy siltstone to fine grain sandstone						
273	274.5	Fine grain sandstone and siltstone, flaser structure						
274.5	279	Siltstone						
279	280	Siltstone and fine grain sandstone, flaser structure						
280	281.2	Siltstone dip 75° to C.A.						
281.2	282.4	Sandstone, fine grain - a single thick bed		Core Size				
282.4	288.2	Siltstone		HQ				
288.2	297.0	Siltstone and fine grain sandstone, flaser structure, dip 85° to C.A.		Hole No.				
		lode cast etc.		DDH 501				
							Page	
							2	



# Diamond Drill Geological Log



Objective:		Sampled:		40 Scale	
Logged By:		Date:		Composites:	
Block:	Sect.:	Place:	App. Bear:	App. Dip.:	Length:

From	To	Discard:	Reason:
297.0	298.6		Siltstone to mudstone, breccia
298.6	300		Coal <span style="float:right">295.0 - 300.0</span>
300.0	300.8		Mudstone
300.8	302.8		Coal <span style="float:right">306.0 - 315.0</span>
302.8	309.7		Siltstone with few thin sandstone beds, flaser structure at bottom
309.7	315		Coal
315	316		Mudstone
316	318.5		Coal
318.5	327		Mudstone, very carbonaceous, containing vitrain bands
327	330		Carbonaceous siltstone
330	339		Sandstone, fine grain, massive, some cross stratification
339	342.3		Mudstone
342.3	344.5		Siltstone and sandstone, flaser structure
344.5	346		Siltstone
346	347		Mudstone
347	348.2		Bone coal
348.2	349.6		Carbonaceous mudstone
349.6	353.5		Siltstone
353.5	356		Siltstone and fine grain sandstone, flaser structure dip 65° to C.A.
356	357		Mudstone
357	363.2		Coal <span style="float:right">354.0 - 360.0</span>
363.2	366.4		Fine grain sandstone and siltstone, flaser structure
366.4	370		Siltstone

Core Size	HQ
Hole No.	501
Page	3



# Diamond Drill Geological Log



Objective:

Sampled:

Logged By:

Date:

Composites:

Block:

Sect.:

Place:

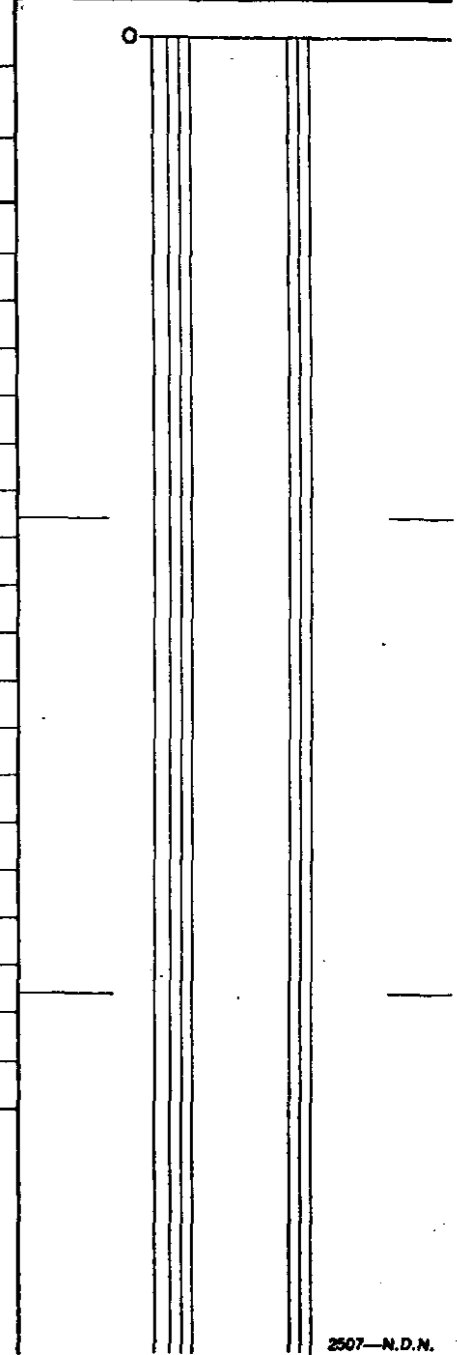
App. Bear:

App.: Dip.:

Length:

From	To	Discard:	Reason:
370	371		Mudstone, vitrain bands
371	375		Siltstone and fine grain sandstone, flaser structure
375	384.6		Sandstone, fine grain, cross stratified
384.6	386.6		Siltstone, two vitrain bands
386.6	387.6		Sandstone, fine grain - thick bed
387.6	405		Siltstone and fine grain sandstone, flaser structure, vitrain band at 405'
405	406		Sandstone, fine grain
406	409.7		Siltstone, some flaser structure
409.7	412		Mudstone, carbonaceous and some bone coal
412	414.5		Mudstone
414.5	417		Coal
417	419		Mudstone
419	422.3		Coal <span style="margin-left: 100px;">418.0 - 420.0</span>
422.3	432.8		Mudstone
432.8	434.3		Coal
434.3	437.0		Mudstone
437.0	438.0		Siltstone and sandstone, flaser structure
438.0	445.5		Mudstone, vitrain bands
445.5	446.5		Sandstone, fine grain, cross stratified
446.5	461.4		Siltstone
461.4	462.3		Sandstone, fine grain to very fine grain
462.3	465		Siltstone
465	471.3		Sandstone, fine grain, cross stratified, laminae of siltstone

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



Core Size

Hole No.

Page

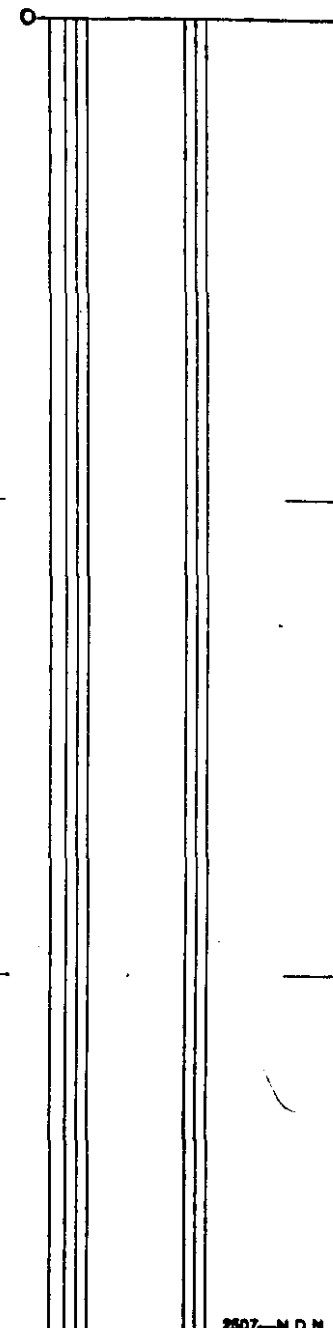
DDH 501

4

# Diamond Drill Geological Log



Objective:		Sampled:		40 Scale		Color Plot & Dips		Ore Classes & Aver.			
Logged By:		Date:		Composites:							
Block:		Sect.:		Place:		App. Bear:		App. Dip.:		Length:	
From	To	Discard:		Reason:							
471.3	477.8			Mudstone							
477.8	483			Sandstone and siltstone, flaser structure (fine grain )							
483	489.8			Siltstone							
489.8	522.0			Fine grain sandstone and siltstone, flaser structure, dip to C.A. 75°							
522.0	530.7			Siltstone							
530.7	532.8			Very carbonaceous mudstone							
532.8	533.7			Coal <span style="margin-left: 100px;">533.0 - 560.0</span>							
533.7	537.0			Mudstone, carbonaceous							
537.0	564.0			Coal							
564.0	577			Mudstone and siltstone, a few vitrain bands							
						Core Size					
						HQ					
						Hole No.		DDE 501		Page 5	



**FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD**

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
1	33.0	36.0	Seam "Part of Upper H"				0.9	52.3	18.2	28.6	3.3,3	0.52	
			CLEAN COAL				0.9	7.9	29.0	62.2	9.8 $\frac{1}{2}$ ,9	0.83	77.0 % Recovery
2	77.7	121.0	Seam "Lower H"				1.0	11.2	28.5	59.3	8 $\frac{1}{2}$ ,8 $\frac{1}{2}$ ,8 $\frac{1}{2}$	0.55	
			CLEAN COAL				1.2	7.4	28.5	62.9	8,8 $\frac{1}{2}$ ,8	0.61	77.0 % Recovery
3	146.0	160.0	Seam "Lower H"				0.9	21.7	24.9	52.5	7 $\frac{1}{2}$ ,8,7 $\frac{1}{2}$	0.55	
			CLEAN COAL				0.9	6.8	27.6	64.6	8 $\frac{1}{2}$ ,8 $\frac{1}{2}$ ,8 $\frac{1}{2}$	0.56	70.6 % Recovery
4													
5	245.0	252.0	Seam "Upper G"				0.8	34.8	20.2	44.2	5 $\frac{1}{2}$ ,5,5 $\frac{1}{2}$	0.55	
	257.0	262.0	CLEAN COAL				1.3	7.9	26.2	64.7	8,8,8 $\frac{1}{2}$	0.75	58.3 % Recovery
6													
7	306.0	315.0	Seam "Lower G"				0.7	32.7	22.1	44.5	6,5 $\frac{1}{2}$ ,6	0.58	
			CLEAN COAL				0.6	8.7	26.0	62.9	8 $\frac{1}{2}$ ,8 $\frac{1}{2}$ ,8 $\frac{1}{2}$	0.93	Recovery = 54.2 %



FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
8													
9	416.0	420.0					0.8	54.7	16.3	28.2	1½,2,2	0.60	
							0.9	7.5	26.4	65.1	9,9,9	0.92	18.5 % Recovery
10													

# Diamond Drill Geological Log



K - FORDING 70(3)A-2

312

Objective:

Sampled:

Logged By: *DM*

Date:

Composites:

Block:

Sect.:

Place: *Green hills*

App. Bear:

App. Dip.:

Length:

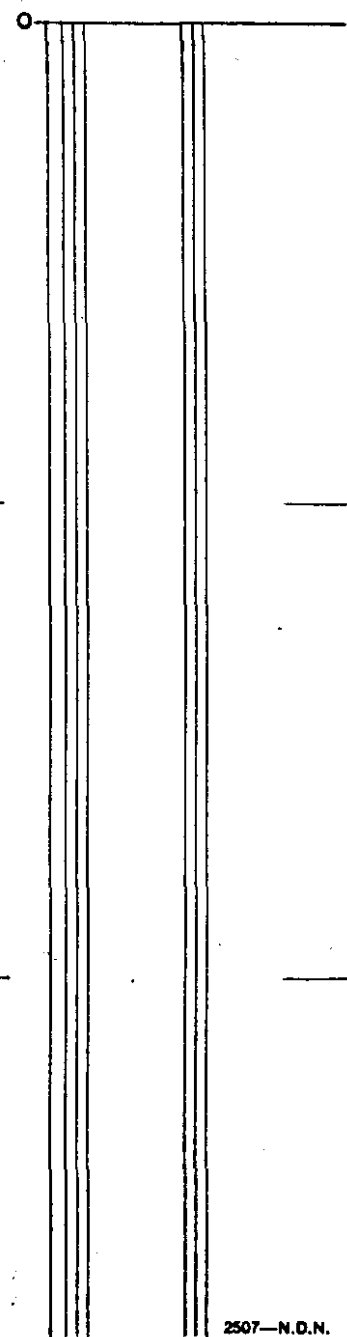
From To

Discard:

Reason: *Revised by radiation log*

0	11	Overburden
11	13.6	Mudstone and mudstone breccia
13.6	15.5	Siltstone
15.5	33.0	Sandstone, fine grain
33.0	40.2	Siltstone and fine grain sandstone, some flaser structure
40.2	41.4	Sandstone, fine grain
41.4	44.0	Siltstone
44.0	56.2	Sandstone and interbedded siltstone
56.2	57.4	Mudstone
57.4	72.5	Coal <i>54.0 - 68.0</i>
72.5	80.1	Siltstone
80.1	82.3	Coal
82.3	88	Carbonaceous mudst. grading into mudstone
88	95.5	SST. Fine grain 65° C.A.
95.5	98.2	Coal <i>93.0 - 96.0</i>
98.2	122	Mudst. Brecciated
122	126	SST. Fine grained current bedding
126	187	Mudst. carbonaceous in upper part, and 126 - 128 brecciated 70° to C.A. This grades into siltstone and fine SST. with current bedding around 187° core brecc. average dip of unit about 65° to C.A.
187	254.3	Mudst. brecciated grading from 202 to 218 thru a SST. fine grained dipping at 45° to C.A. back into a mudstone. The core in this unit is heavily brecciated.
254.3	275.5	Coal 100% recovery <i>251.0 - 270.0</i>

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



Core Size

HQ

Hole No.

DDH 502

Page

1

# Diamond Drill Geological Log

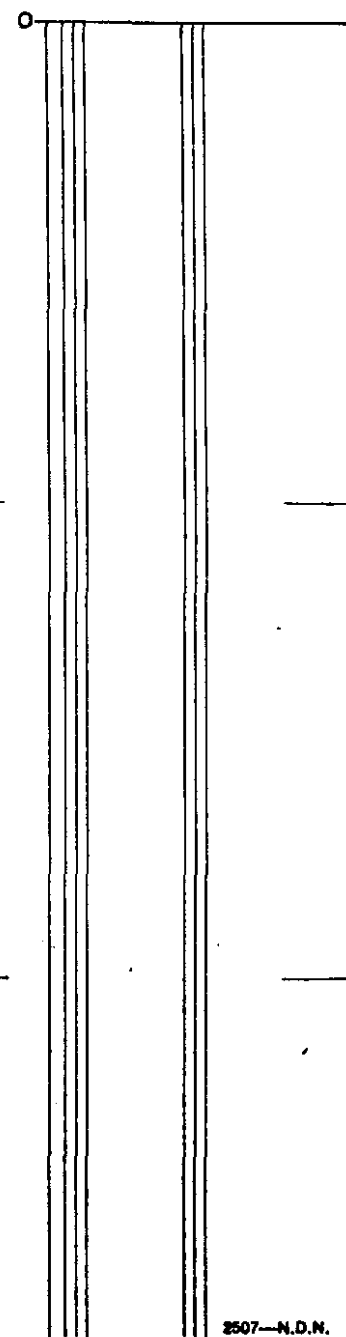


Objective:		Sampled:	
Logged By:		Composites:	
Block:	Date:	Place:	App. Bear:
			App. Dip:
			Length:

40 Scale
Color Plot & Dips
Ore Classes & Aver.

From	To	Discard:	Reason:
275.5	286		Mudst. parting
286	292.7		Coal 95% recovery <span style="float:right">282.0 - 288.0</span>
292.7	306		Mudst. competent 45° to C.A. Carbonaceous in upper 5' of unit
306	348.5		Silty SST. current bedding 45° to C.A. numerous vitrain bands and at 337' a few near vertical fractures in core
348.5	351		Coal <span style="float:right">368.0 - 378.0</span>
351	372.5		Mudst. alternating with fine SST. 45° to C.A.
372.5	384		Coal 95% recovery
384	389.6		Mudstone
389.6	401.4		Coal 100% recovery <span style="float:right">386.0 - 401.0 -</span>
401.4	429		Mudst. carbonaceous at top grading thru siltst. back to mudst. Parts of this unit are brecc.
429	432		SST. Med. grained
432	449		Mudstone
449	455		Coal 100% recovery <span style="float:right">446.0 - 450.0</span>
455	457.5		Shale parting
457.5	459.3		Coal
459.3	500		Mudst. and fine SSTs. Alternating current bedding. Dip in this unit varies from 60° to 80° to C.A.
			The core is brecciated.
500	503		Sandstone, coarse grain, thinly bedded; dip to C.A. 59°
503	531		Brecciated sandstone, bottom 2 feet mudstone breccia, fault
531	547		Mudstone
547	555.6		Fine grain sandstone, siltstone, and mudstone, some flaser structure
555.6	558.6		Sandstone, fine grain to very fine grain
558.6	587.5		Siltstone, a few thinly bedded sandstone partings with flaser structure

Core Size	HQ
Hole No.	DDH 502
Page	2



# Diamond Drill Geological Log



Objective:		Sampled:				40 Scale		
Logged By: <b>D.M.</b>		Date: <b>Aug. 30</b>		Composites:		Color Plot & Dips	Ore Classes & Aver.	
Block:	Sect.:	Place:	App. Bear:	App. Dip.:	Length:	<div style="text-align: right; margin-bottom: 5px;">0</div> <div style="border-left: 1px solid black; border-right: 1px solid black; height: 100px;"></div>		
From	To	Discard:	Reason:					
587.5	590.0		Sandstone, very fine grain, thick to thinly bedded					
590	595.5		Interbedded fine grain sandstone and siltstone, flaser structure dip 58° to C.A.					
595.5	604.0		Sandstone, fine to very fine grain, dip to C.A. 58°					
604.0	615.3		Interbedded fine grain sandstone and siltstone					
613.3	626.3		Siltstone					
626.3	628.5		Mudstone					
628.5	637.6		Coal <span style="margin-left: 20px;"><i>629.0 - 633.0</i></span>					
637.6	638.6		Mudstone					
638.6	655.7		Coal <span style="margin-left: 20px;"><i>636.0 - 650.0</i></span> <span style="margin-left: 20px;"><i>parting 644.0 - 646.0</i></span>					
655.7	691		Siltstone and sandy siltstone, some flaser structure near bottom of hole					
					Core Size			
					HQ			
					Hole No.	DDH 502	Page 3	



FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
1	54	68	SEAM I				1.0	8.7	29.8	60.5	8½ 8½ 8½	.58	
			CLEAN COAL				0.9	6.6	29.8	62.7	8½ 8½ 8½	.57	97.9 % Recovery
2	250	270	Seam "H"				0.8	12.0	28.4	58.8	8½ 8½ 8½	.49	
	282	288					1.1	7.8	27.2	63.9	8½ 8½ 8½	.49	79.6 % Recovery
3	368	380	Seam "G"				0.9	22.7	24.3	52.1	7½, 7½, 7	0.71	
	386	401.4					1.2	7.8	26.6	64.4	8½, 8½, 8½	0.73	77.3 % Recovery
4	446	451	Seam "Minor"				0.8	38.5	20.1	40.6	4, 3½, 4	1.1	
			CLEAN COAL				1.3	11.1	25.7	61.8	8, 8, 8	.94	49.0 % Recovery
5	624	633.5	Seam F				0.7	40.1	17.4	41.8	2, 1½, 2	.47	
	635	644					0.8	9.0	24.2	65.9	6, 5½, 6	.58	44.0 % Recovery
	646	651											

FORDING OPERATIONS  
DIAMOND DRILL SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
57.4	72.5	RAW COAL (SEAM I)				1.0	8.7	29.8	60.5	8½, 8½, 8½	0.50	
		CLEAN COAL				0.9	6.6	29.8	62.7	8½, 8½, 8½	0.57	Recovery 97.9%
628.5	655.7	RAW COAL (SEAM F)				0.7	40.7	17.4	41.8	2, 1½, 2	0.47	
		CLEAN COAL				0.8	9.0	24.2	65.9	6, 5½, 6	0.58	Recovery 44.0%

# Diamond Drill Geological Log

LONGYEAR DRILL LOG



K-FORING 70(3)A-2

40 Scale

Color Plot & Dips Ore Classes & Aver.

Objective:

Sampled: **312**

Logged By: \_\_\_\_\_ Date: \_\_\_\_\_

Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: GREENHILLS App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From	To	Discard:	Reason:
0	20.0	Overburden	
20.0	24.0	Sandstone fine grain current ripples and cross stratification	dip to ca - 51°
24.0	26.4	Breccia of mudstone	
26.4	27.4	Coal	36.0 - 38.0
27.4	43.7	Siltstone'	
43.7	45.0	Coal	44.0 - 48.0
45.0	47.1	Mudstone	
47.1	50.0	Coal	
50.0	52.7	Very carbonaceous mudstone	
52.7	56.8	Siltstone	
56.8	63.3	Sandstone - medium grain cross bedded	
63.3	71.4	Interbedded sandstone and siltstone	dip to ca - 50°
71.4	77.6	Mudstone and siltstone	
77.6	81.2	Coal	72.0 - 77.0
81.2	82.7	Sandstone fine grain cross bedded	
82.7	94.0	Interbedded mudstone and siltstone	
94.0	96.8	Sandy siltstone	
96.8	97.0	Mudstone	
97.0	99.0	Coal	
99.0	100.0	Mudstone	
100.0	101.4	Brecciated mudstone and gouge	
101.4	154.0	Siltstone sandy siltstone and sandstone flaser structure	
154.0	160.0	Sandstone medium grain, abundant coalified plant material,	dip to ca - 50°

Core Size

H. Q.

Hole No. DDH.503

Page 1

# Diamond Drill Geological Log



40 Scale

Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_ Color Plot & Dips \_\_\_\_\_ Ore Classes & Aver. \_\_\_\_\_

Logged By: \_\_\_\_\_ Date: \_\_\_\_\_ Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From	To	Discard:	Reason:
160.0	176.0		Interbedded siltstone and sandstone
176.0	180.0		Very fine grain sandstone massive
180.0	187.0		Interbedded siltstone and sandstone flaser structure
187.0	188.4		Mudstone
188.4	191.0		Coal <i>184.0 - 188.0</i>
191.0	192.5		Interbedded siltstone and sandstone
192.5	196.8		Medium grain sandstone
196.8	213.0		Interbedded siltstone and sandstone dip to ca - 59° highly fractured 205' - 210
213.0	217.0		Siltstone
217.0	220.0		Mudstone
220.0	220.7		Coal
220.7	221.4		Mudstone
221.4	227.7		Interbedded siltstone, sandstone w/ some <del>massive</del> mudstone flaser structure breccia at 222.7 to 223.2
227.7	233.0		Sandstone very fine grained massive to laminated
233.0	237.0		Siltstone some interbedded sandstone
237.0	239.0		Mudstone
239.0	242.6		Coal <i>235.0 - 239.0</i>
242.6	247.0		Mudstone
247.0	252.2		Coal <i>243.0 - 254.0 Parting 248.0 - 250.0</i>
252.2	253.0		Mudstone
253.0	257.0		Coal
257.0	262.0		Siltstone with few interbeds of sandstone and carbonaceous mudstone
262.0	300.7		Mudstone dip to ca 50° - 60° breccia 279' - 290'

Core Size

Hole No. DDH. 503

Page 2

# Diamond Drill Geological Log



Objective:

Sampled:

Logged By:

Date:

Composites:

Block:                      Sect.:                      Place:                      App. Bear:                      App. Dip:                      Length:

From      To      Discard:                      Reason:

300.7	303.5	Coal	297.0 - 300.0
303.5	306.0	Carbonaceous mudstone	
306.0	323.0	Sandstone fine grain several calcite filled fractures 315'-317'	band of very fossiliferous mudstone 45° to ca
323.0	324.4	Coal crushed	
324.4	327.0	Sandstone fine grained	45° to ca
327.0	337.5	Mudstone carbonaceous	
337.5	339.0	Coal	
339.0	362.5	Mudstone	45° to ca
362.5	372.0	Mudstone clayex friable not well consolidated	
372.0	383.0	Mudstone breccia and gouge	
383.0	383.5	Coal	
383.5	397.0	Mudstone	
397.0	407.5	Siltstone fractured	
407.5	422.0	Siltstone and fine grained sandstone flaser structure brecciated 414 - 416	cross bedding in sandstone
422.0	434.6	Coal	418.0 - 430.0
434.6	438.8	Mudstone	
438.8	442.0	Siltstone and fine grain sandstone	
442.0	445.5	Siltstone fractured	
445.5	446.3	Sandstone very fine grained	
446.3	447.3	Mudstone	
447.3	449.3	Coal	
449.3	452.3	Sandy siltstone with some interbedded sandstone	
452.3	453.3	Coal	

Core Size

Hole No. DDH. 503

Page 3

40 Scale  
Color Plot & Dips      Ore Classes & Aver.

0

# Diamond Drill Geological Log

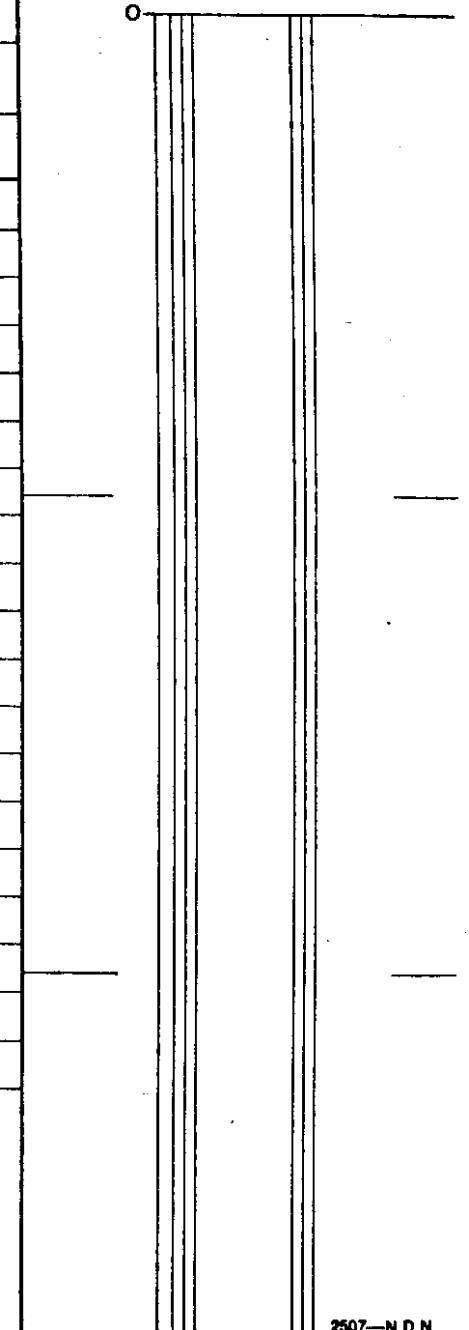


40 Scale

Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_  
 Logged By: \_\_\_\_\_ Date: \_\_\_\_\_ Composites: \_\_\_\_\_  
 Color Plot & Dips \_\_\_\_\_ Ore Classes & Aver. \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App.: Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From	To	Discard:	Reason:
453.3	456.8		Siltstone
456.8	472.0		Sandstone very fine grain
472.0	475.0		Siltstone w/ interbedded sandstone flaser structure
475.0	480.0		Sandstone medium grain massive
480.0	483.0		Siltstone
483.0	507.5		Sandstone medium grain cross bedded dip to ca 57°
507.5	525.6		Interbedded sandstone and siltstone flaser structure
525.6	535.0		Brecciated mudstone with two minor coal partings 529' and 530'
535.0	550.6		Coal <i>523.0 - 528.0</i> <i>531.0 - 540.0</i>
550.6	557.6		Sandstone
557.6	576.0		Mudstone and siltstone
576.0	598.0		Sandstone medium grain massive upper part fractured
598.0	606.0		Mudstone and siltstone breccia
606.0	610.0		Siltstone
610.0' END OF HOLE			



Core Size H.Q.

Hole No. DDH. 503

Page 4

FORDING OPERATIONS  
DIAMOND DRILL SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
43.7	50.0	SEAM H. RAW COAL				0.9	45.6	23.5	30.0	5,4,4	.69	
		CLEAN COAL				1.0	11.8	30.5	56.8	7½,7½,8	.86	Recovery 24.3%
239.0	242.6	SEAM G RAW COAL				1.0	38.5	21.9	38.6	3½,3,3	.58	
247.0	257.0	CLEAN COAL				0.9	8.1	30.4	60.7	7½,8,8	.73	Recovery 46.2%
422.0	434.6	? Seam RAW COAL				0.8	18.6	26.3	54.3	7,7½,7½	.88	
		CLEAN COAL				1.0	8.3	28.4	62.3	7½,7,7½	.85	Recovery 75.8%
535.0	550.6	SEAM F RAW COAL				0.7	33.0	23.9	42.4	6,5½,5½	.52	
		CLEAN COAL				1.0	6.1	29.9	63.0	8½,8½,8	.59	Recovery 72.6%

# Diamond Drill Geological Log



K-FORDING 70(3)A-2

Objective:

Sampled:

312

Logged By: D.M.

Date:

Composites:

Block:

Sect.:

Place:

Green hills

App. Bear:

App. Dip.:

Length:

From To Discard:

Reason:

Revised by radiation log

0	10	Overburden
10	23.5	Sandstone, medium to coarse grain, current bedding, cross bedded
23.5	27.0	Sandstone, fine grain, massive
27	35	Siltstone
35	43	Siltstone with interbedded sandstone in lower portion
43	55.8	Medium grain sandstone, very little interbedded siltstone, lodecast, cross bedding, dip 81° to C.A.
55.8	69	Siltstone, sandy, some interbedded sandstone, dip 72° to C.A.
69	71.5	Limestone, argillaceous, upper part brecciated
71.5	75.5	Siltstone
75.5	82.5	Fault gouge and siltstone breccia
82.5	84.5	Coal 80.0 - 84.0
84.5	86.4	Very carbonaceous shale and bone coal
86.4	87	Mudstone
87	99	Interbedded medium grain sandstone and siltstone, flaser structure
99	103	Mudstone
103	106	Siltstone breccia
106	107	Siltstone
107	109.5	Siltstone and interbedded sandstone
109.5	119.2	Mudstone
119.2	123.8	Coal 116.0 - 122.0
123.8		Interbedded siltstone and sandstone flaser structure
123.8	160.5	Interbedded sandstone and siltstone, flaser structure; crossbedded, lodecast mudclast and worm burrows, coal 137.0 - 137.5 dip 85° to C.A., Flame Structure

Core Size

HQ

Hole No.

DDH 504

Page

1

40 Scale

Color Plot & Dips

Ore Classes & Aver.



# Diamond Drill Geological Log



Objective:		Sampled:		40 Scale	
Logged By:		Date:		Composites:	
Block:	Sect.:	Place:	App. Bear:	App. Dip.:	Length:
From	To	Discard:	Reason:		
160.5	164.5	Mudstone			
164.5	167.0	Coal	163.0 - 165.0		
167.0	169.5	Mudstone			
169.5	175.4	Coal	168.0 - 176.0		
175.4	176.3	Mudstone			
176.3	177.7	Coal			
177.7	185.0	Carbonaceous mudstone w/ vitrain bands			
185.0	186.0	Coal			
186.0	212.3	Siltstone w/ interbedded fine grain sandstone; sandstone beds ranging up to 1.0' in thickness, flaser structure			
212.3	218.3	Sandstone, medium grain, cross bedded, some interbedded siltstone, flaser structure; dip to C.A. = 83°			
218.3	221.6	Siltstone w/ interbedded sandstone			
221.6	223	Mudstone			
223	229.2	Coal short 1.2'	221.0 - 227.0		
229.2	232.0	Siltstone and sandy siltstone			
232	233	Mudstone			
233	234.1	Coal			
234.1	236.0	Siltstone w/ interbedded sandstone			
236.0	247.3	Sandstone w/ interbedded siltstone, cross bedded; fine to medium grain, alternating, dip to C.A. 82°, flaser structure			
247.3	255.0	Sandstone, medium grain, (clean), cross bedded, mudclast at base, dip 80° to C.A.	Core Size HQ		
255.0	259.6	Sandstone and interbedded siltstone, flaser structure	Hole No. DDH 504      Page 2		
259.6	293	Mudstone			

# Diamond Drill Geological Log



Objective:

Sampled:

Logged By: \_\_\_\_\_ Date: \_\_\_\_\_

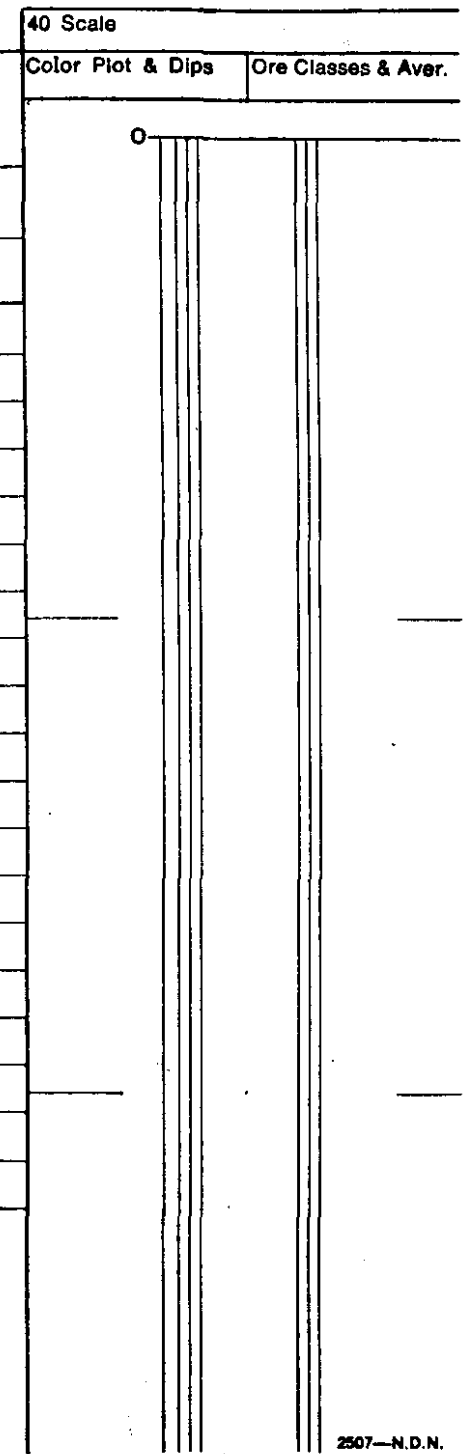
Composites:

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From \_\_\_\_\_ To \_\_\_\_\_ Discard: \_\_\_\_\_ Reason: \_\_\_\_\_

293	302.5	Coal	291.5 - 298.0
302.5	317.5	Siltstone and sandy siltstone	
317.5	325.5	Sandstone, fine to medium grain, convolute bedding, flame structure - mudclast at base	
325.5	329.0	Siltstone breccia and clay gouge	
329	330.5	Siltstone	
330.5	332.5	Sandstone, fine to medium grain, bioturbation, lodocast; dip to C.A. - 83°	
332.5	335.9	Interbedded siltstone and sandstone breccia	
335.9	340.9	Interbedded siltstone and sandstone	
340.9	344.5	Interbedded siltstone and sandstone, fractured and brecciated	
344.5	346.3	Coal	
346.3	347.0	Mudstone	
347.0	351.5	Interbedded sandstone and siltstone, flaser structure	
351.5	362.6	Mudstone	
362.6	363.6	Interbedded sandstone and siltstone	
363.6	387.4	Interbedded siltstone and mudstone	
387.4	395.6	Siltstone and mudstone breccia	
395.6	397.0	Mudstone	
397.0	414.7	Coal	394.0 - 412.0
414.7	418.3	Siltstone w/ interbedded sandstone	
418.3	419.3	Coal	
419.3	422.7	Mudstone	
422.7	425.0	Coal	424.0 - 428.0
425.0	440.5	Interbedded siltstone and sandstone, current bedding; dip 73° to C.A.	

Core Size  
 HQ  
 Hole No. DDE 504  
 Page 3



# Diamond Drill Geological Log



Objective:

Sampled:

Logged By: \_\_\_\_\_ Date: \_\_\_\_\_

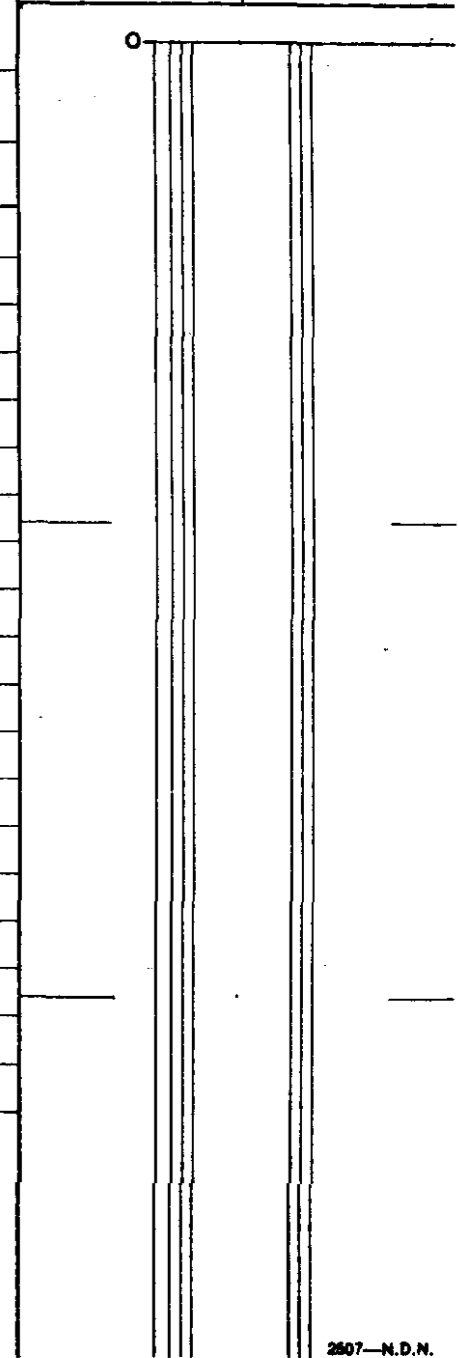
Composites:

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From To Discard: Reason:

440.5	447		Sandstone, medium grain, cross bedded
447	456.0		Interbedded mudstone, siltstone and sandstone
456.0	456.8		Mudstone
456.8	462.6		Coal <span style="margin-left: 100px;">454.0 ~ 458.0</span>
462.6	463.2		Mudstone
463.2	500.8		Sandstone with varying amounts of interbedded siltstone; cross bedding, lode casts, flame structure, bioturbation; dip 76° to C.A.
500.8	524.0		Siltstone
524.0	535.0		Sandstone, medium grain, cross bedded
535.0	540.0		Interbedded sandstone and siltstone
540.0	542		Siltstone
542			Sandstone; coarse grain, crossbedded, dip 83° to C.A.
			Bottom of Hole

40 Scale  
Color Plot & Dips    Ore Classes & Aver.



Core Size

HQ

Hole No.

DDE 504

Page

4

FORDING OPERATIONS  
DIAMOND DRILL SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
169.5	177.7	LOWER G				0.6	32.6	25.5	47.3	6 $\frac{1}{2}$ 6 $\frac{1}{2}$ 6 $\frac{1}{2}$	.88	
		CLEAN COAL				0.8	10.0	27.2	70.2	8 $\frac{1}{2}$ 8 $\frac{1}{2}$ 8 $\frac{1}{2}$	.79	Recovery 43.2%
293.0	302.5	MINOR				0.6	26.5	24.0	48.9	4,4,3 $\frac{1}{2}$	1.10	
		CLEAN COAL				1.1	8.3	27.0	63.5	8 $\frac{1}{2}$ 8 $\frac{1}{2}$ 8 $\frac{1}{2}$	.99	Recovery 69.9%
397.0	407.0	SEAM F				0.6	26.7	21.5	51.2	3,2 $\frac{1}{2}$ 2 $\frac{1}{2}$	.55	
		CLEAN COAL				1.2	7.4	25.0	66.4	7,7,7	.58	Recovery 62.2%
456.0	462.6	MINOR				0.6	38.8	18.7	41.9	3,2 $\frac{1}{2}$ ,2 $\frac{1}{2}$	.96	
		CLEAN COAL				0.8	12.1	21.2	65.9	8,7 $\frac{1}{2}$ ,7 $\frac{1}{2}$	.50	Recovery 41.2%

# Diamond Drill Geological Log

BECKERS LOG



1C-FORGING 70(3)A-2

Objective:

Sampled:

Logged By: Date: November 6, 1970

Composites:

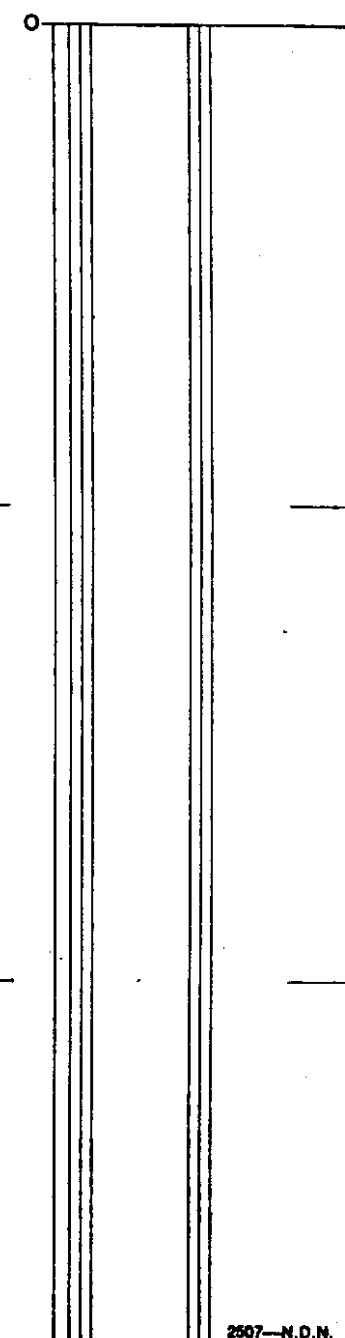
**312**

Block: Sect.: Place: *Greenhills* App. Bear: App.: Dip.: Length:

From	To	Discard:	Reason:
0	4	Overburden	
4	7	Coal	
7	35	Shale	
35	78	Sandstone	
78	111	Sandyshale and shale	
111	114	Coal	<i>110.0 - 113.0</i>
114	122	Shale	
122	140	Sandstone	
140	171	Shale	
171	186	Sandstone	
186	192	Shale	
192	227	Coal	<i>189.5 - 224.0</i>
227	236	Shale	
236	241	Sandstone	
241	261	Shale	
261	269	Sandstone	
269	274	Shale	
274	276	Sandstone	
276	279	Shale and coal traces	
279	284	Sandstone	
284	314	Coal	<i>282.5 - 313.0</i>
314	317	Shale	
317	322	Coal	<i>316.0 - 320.0</i>

*Revised by radiation log*

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



Core Size  
Hole No. RH 505  
Page 1 of 2

# Diamond Drill Geological Log



Objective:			Sampled:			40 Scale	
Logged By:			Date:			Color Plot & Dips	
Block:			Sect.:			Ore Classes & Aver.	
Place:			App. Bear:			App. Dip.:	
Length:			Composites:				
From	To	Discard:	Reason:				
322	338	Sandstone with shale layers					
338	342	Shale					
342	350	Coal	342.0 - 348.0				
350	374	Shale					
374	461	Sandstone					
461	477	Coal	460.0 - 484.0				
477	478	Shale					
478	484	Coal					
484	494	Sandstone					
494	495	Coal					
495	500	Sandstone					
500' END OF HOLE							
						Core Size	
						Hole No. RH 505	
						Page 2 of 2	

FORDING OPERATIONS  
DIAMOND DRILL SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
0.0	7.0	MINOR RAW COAL				5.1	18.0	30.5	46.4	ONA	.66	
		CLEAN COAL				5.1	15.2	28.9	50.0	ONA		Recovery 14.8%
11.0	14.0	? Seam RAW COAL				0.7	73.8	10.4	15.1	1,1,1	.27	
		CLEAN COAL				0.3	48.4	18.9	31.9	4,4½,4	.55	Recovery 17.1%
192.0	227.0	E SEAM RAW COAL				0.4	22.6	21.3	55.7	5½,6,6	.25	
		CLEAN COAL				0.2	13.3	23.6	62.6	8,8,7½	.34	Recovery 81.3%
300.0	323.0	D SEAM RAW COAL				0.3	24.5	21.5	53.7	3,3,3	.22	
		CLEAN COAL				0.2	11.5	22.1	65.9	4,4½,4½	.29	Recovery 76.2%
342.0	350.0	LOWER D RAW COAL				0.5	24.5	19.4	56.6	3,2½,2½	.44	
		CLEAN COAL				0.2	12.9	21.1	65.4	5,4½,4½	.46	Recovery 81.4%
461.0	475.0	B SEAM RAW COAL				0.5	17.8	20.3	61.4	5½,5½,5	.27	
		CLEAN COAL				0.2	7.0	21.9	70.5	4½,4½,4½	.36	Recovery 95.1%





# Diamond Drill Geological Log



K-FORDING 70(3)A 2

## BECKER LOG

Objective:

Sampled:

Logged By:

Date: **November 3/70**

Composites:

**312**

Block:

Sect.:

Place: *Green hills*

App. Bear:

App. Dip.:

Length:

From

To

Discard:

Reason: *Revised by radiation log*

0 1.5 Overburden

1.5 4 Coal

4 67 Sandstone

67 68 Shale

68 69 Coal *68.0 - 75.5*

69 70 Shale

70 78 Coal

78 80 Shale

80 108.5 Sandstone

108.5 110 Coal *109.0 - 106.0*

110 132 Sandstone

132 147 Shale

147 155 Sandstone

155 171 Shale

171 194 Coal *169.0 - 186.5*

194 215 Shale

215' End of Hole

Core Size

Hole No. **RH 506**

Page 1 of 1

FORDING OPERATIONS  
DIAMOND DRILL SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
1.5	4.0	MINOR SEAM				3.1	20.3	25.5	51.1	ONA	.80	
						3.0	11.9	26.5	58.0	ONA	.63	Recovery 19.4%
68.0	78.0	LOWER G				0.7	35.3	20.1	43.9	6,5 $\frac{1}{2}$ ,6	.80	
						0.1	14.7	25.2	59.0	8,8,8 $\frac{1}{2}$	.99	Recovery 88.2%
108.5	110.0	F. SEAM				0.5	35.8	20.3	43.4	4 $\frac{1}{2}$ ,5,5	.80	
						0.1	22.4	23.9	52.7	6,5 $\frac{1}{2}$ ,6	.91	Recovery 84.4%



# Diamond Drill Geological Log



K-FARROW 70(3)A-2

## BECKER LOG

Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_  
 Logged By: \_\_\_\_\_ Date: November 3/70 Composites: **312**

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: Breenhills App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

40 Scale  
 Color Plot & Dips  
 Ore Classes & Aver.

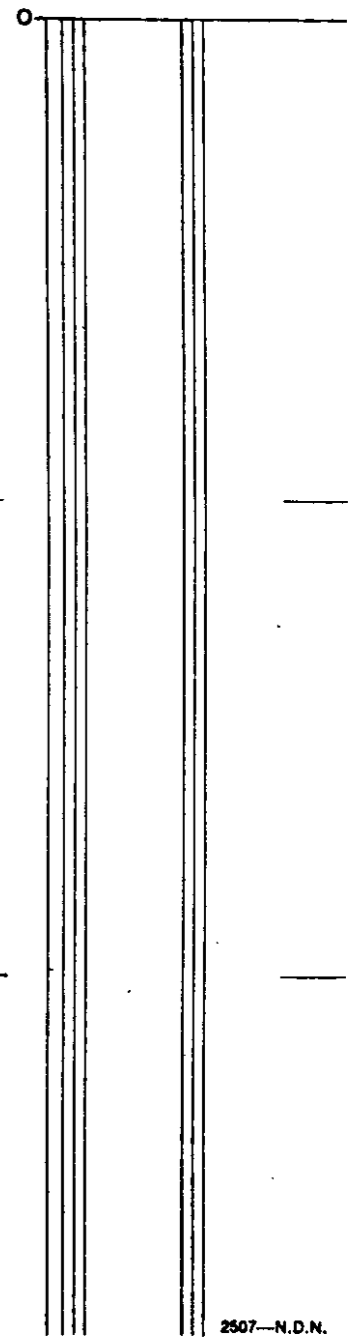
From	To	Discard:	Reason:
0	17	Overburden	
17	47	Shale	
47	50	Coal	50.0 - 52.0
50	72	Shale	
72	91	Coal	82.5 - 100.0
91	92	Shale	
92	99	Coal	
99	102	Shale	
102	133	Sandstone	
133	146	Shale	
146	166	Sandstone	
166	179	Shale	
179	215	Sandstone	
215	218	Sandy shale	
218	222	Sandstone	
222	248	Sandstone	
248	269	Shale	258.0 - 261.5
269	270	Coal Stringer	269.0 - 273.0
270	277	Shale	
277	288	Sandstone	
288	291	Shale	
291	332	Sandstone	
332	348	Coal	332.0 - 344.0

*Revised by radiation log*

Core Size

Hole No. RH 507

Page 1 of 1



# Diamond Drill Geological Log



Objective:

Sampled:

Logged By:

Date:

Composites:

Block:

Sect.:

Place:

App. Bear:

App.: Dip.:

Length:

From To

Discard:

Reason:

499	507	Shale	
507	525	Sandstone	
525	528.5	Shale	
528.5	529	Coal stringers	
529	550	Sandstone	

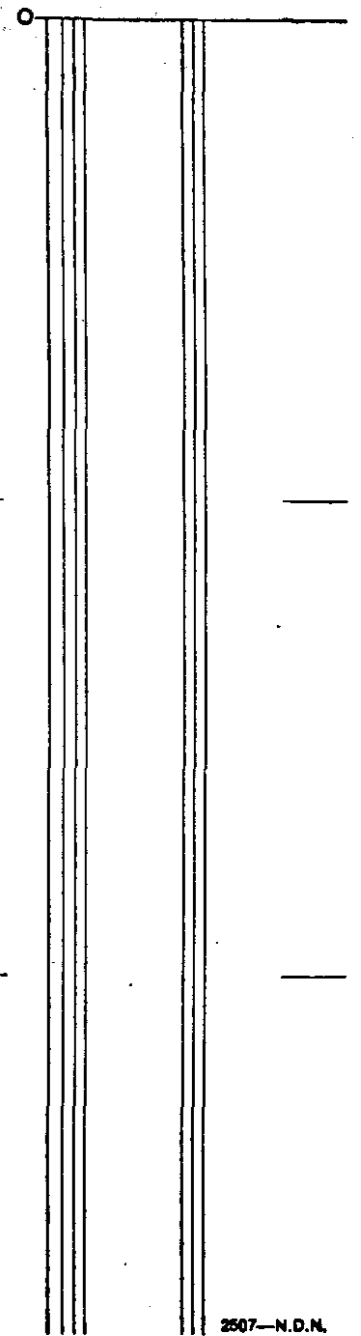
550' End of Hole

Core Size

Hole No. RH 507

Page 3 of 3

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



FORDING OPERATIONS  
DIAMOND DRILL SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
47.0	50.0	MINOR RAW COAL				1.3	12.3	28.3	58.1	8 $\frac{1}{2}$ , 8 $\frac{1}{2}$ , 8 $\frac{1}{2}$	.82	
		CLEAN COAL				0.8	6.7	29.8	62.7	7 $\frac{1}{2}$ , 8, 8	.81	Recovery 87.3%
72.0	99.0	SEAM I RAW COAL				1.3	30.9	23.6	44.2	7 $\frac{1}{2}$ , 7 $\frac{1}{2}$ , 7 $\frac{1}{2}$	.52	
		CLEAN COAL				1.3	13.8	28.0	56.9	8, 8, 8	.65	Recovery 66.8%
332.0	348.0	LOWER H RAW COAL				1.2	31.1	23.7	44.0	7, 7 $\frac{1}{2}$ , 7 $\frac{1}{2}$	.71	
		CLEAN COAL				1.0	11.2	27.9	59.9	8, 8, 8	.59	Recovery 59.2%
356.0	359.0	MINOR RAW COAL				1.2	39.3	22.4	37.1	5, 5, 5	.55	
		CLEAN COAL				1.0	20.1	26.3	52.7	8, 8, 7 $\frac{1}{2}$	.68	Recovery 60.7%
364.0	366.0	RAW COAL				1.1	50.4	17.8	30.7	3, 3, 3	.38	
		CLEAN COAL				1.0	24.1	24.7	50.2	7, 7 $\frac{1}{2}$ , 7	.65	Recovery 42.6%
382.0	385.0	MINOR RAW COAL				0.9	19.9	24.6	54.6	7, 7 $\frac{1}{2}$ , 7	.74	
		CLEAN COAL				0.9	9.4	27.0	63.2	7 $\frac{1}{2}$ , 7 $\frac{1}{2}$ , 7 $\frac{1}{2}$	.87	Recovery 86.9%

# Diamond Drill Geological Log



K-FACINGS 70(3)A-2

Objective:		Sampled:		<b>312</b>	
Logged By:		Composites:			
Date: 14 October 1970		Block:		40 Scale	
Sect.:		Place: <i>Greenhills</i>		Color Plot & Dips	
App. Bear:		App. Dip.:		Ore Classes & Aver.	
Length:					

From	To	Description	Reason:
		Started September 30, 1970	<i>Revised by radiation log</i>
0	7	Overburden	
7	10	Shale	
10	14	Sandstone	
14	16	Coal	
16	21	Shale	
21	64	Sandstone	
64	69	Shale	
69	83	Coal	<i>71.0 - 90.0 parting 65.0 - 78.0</i>
83	95	Shale w/ sandstone layers	
95	156	Sandstone	
156	200	Sandstone	
200	204	Sandy shale	
204	205	Coal	
205	214	Sand shale	
214	231	Shale	
231	239	Coal	<i>232.0 - 237.0</i>
239	245	Shale	
245	250	Coal	<i>245.0 - 251.0</i>
250	252	Shale	
252	255	Coal Shale stringer	
255	264	Sandstone	
264	276	Sandstone	
276	278	Shale	

Core Size 3 7/8

Hole No. RH 508

Page 1

# Diamond Drill Geological Log



Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_  
 Logged By: \_\_\_\_\_ Date: 14 October 1970 Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

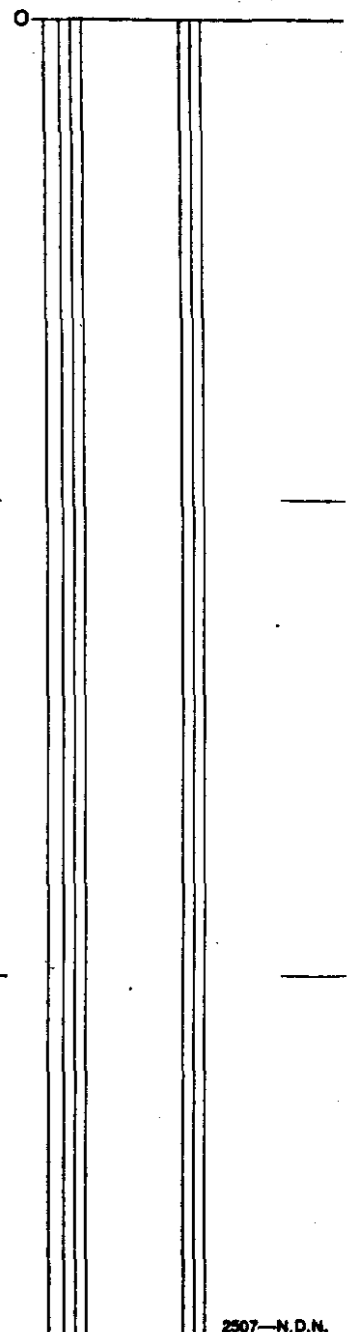
From	To	Discard:	Reason:
278	280	Sandstone	
280	296	Coal	280.0 - 296.0
296	301	Sandstone	
301	302	Coal	
302	304	Shale	
304	310	Sandstone	
310	340	Sandstone	
340	348	Shale	
348	358	Sandstone	
358	360	Shale	
360	372	Sandstone	
372	377	Shale	
377	378	Coal stringer	
378	380	Sandstone	
380	386	Shale	
386	388	Coal	386.0 - 387.0
388	392	Shale	
392	398	Coal	
398	414	Shale	
414	436	Sandstone	
436	437	Shale	
438	449	Sandstone	
449	459	Coal	448.0 - 458.0

Core Size 3 7/8

Hole No. RH 508

Page 2

40 Scale  
 Color Plot & Dips  
 Ore Classes & Aver.





# Diamond Drill Geological Log



40 Scale  
Color Plot & Dips    Ore Classes & Aver.

Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

Logged By: \_\_\_\_\_ Date: 14 October 1970 Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: *Greenhills* App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From	To	Discard:	Reason:
459	471		
459	471	Shale	
471	473	Sandstone	
473	481	Shale	
481	491	Sandstone	
491	514	Sandstone	
514	515	<del>Sandstone</del>	
515	520	Coal	
520	521	Shale	
521	528	Sandstone	
528	535	Sandstone	
535	536	Shale	
536	550	Sandstone	
550	553	Shale	
553	554	Sandstone	
554	555	Coal stringers	
555	560	Sandstone	
560	571	Shale	
571	574	Sandstone	
574	577	Shale	
577	579	Sandstone	
579	582	Shale Coal	
582	585	Coal	
585	586	Coal	
586	588	Shale	
588	595	Sandstone	

Core Size  
3 7/8

Hole No. 508

Page 3

595 End of Hole

FORDING OPERATIONS  
DIAMOND DRILL SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
252.0	255.0	UPPER H (2 SEAMS) RAW COAL				1.3	59.2	17.7	21.8	3.3.3	.36	
		CLEAN COAL				0.7	29.6	24.5	45.2	9.7, 7 1/2	0.61	Recovery 29.3%
280.0	296.0	LOWER H RAW COAL				1.4	11.9	27.1	59.6	8 1/2, 8 1/2, 8 1/2	.47	
		CLEAN COAL				0.6	7.7	29.2	62.5	8 1/2, 8 1/2, 8 1/2	.59	Recovery 90.2%
386.0	388.0	MINOR RAW COAL				1.4	20.0	24.6	54.0	7 1/2, 7 1/2, 7 1/2	.63	
		CLEAN COAL				0.6	10.2	27.6	61.6	8.8 1/2, 8 1/2	.74	Recovery 80.3%
392.0	398.0	MINOR RAW COAL				1.1	21.6	22.9	54.9	6 1/2, 7.7	.82	
		CLEAN COAL				0.6	6.3	27.7	65.4	8.8, 8 1/2	.75	Recovery 67.8%
449.0	459.0	MINOR RAW COAL				0.9	19.4	24.5	55.2	7 1/2, 7 1/2, 7 1/2	.77	
		CLEAN COAL				0.8	13.4	26.9	58.9	8, 7 1/2, 8	.75	Recovery 68.4%



# Diamond Drill Geological Log



K-FORING 70(3) A-2

Objective:

Sampled:

Logged By:

Date: November 3, 1970

Composites:

312

Block:

Sect.:

Place:

App. Bear:

App.: Dip.:

Length:

Green hills

From To Discard:

Reason:

Revised by Radiation log

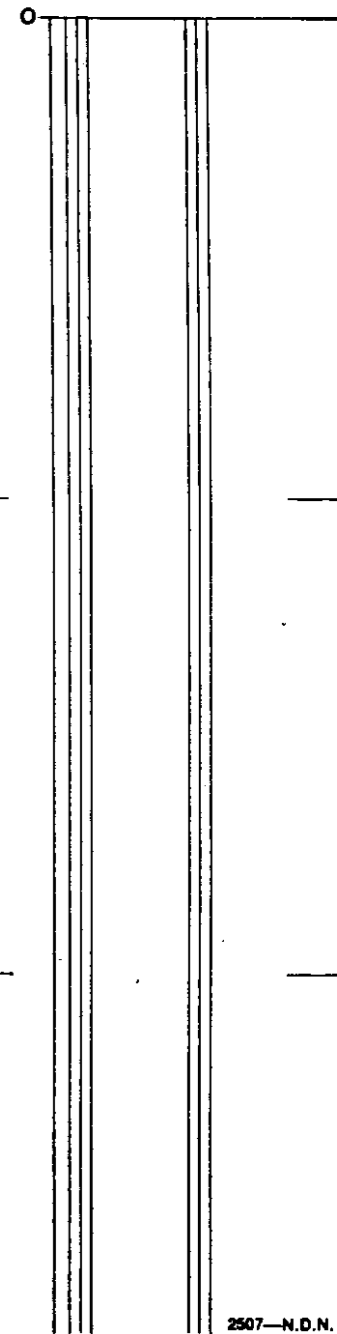
From	To	Discard:
0	18	Overburden
18	20	Coal
20	23	Shale
23	26	Sandstone
26	29	Coal
29	34	Sandstone
34	40	Coal
40	69	Sandstone
69	76	Shale
76	79	Sandstone
79	82	Sandy shale
82	94	Sandstone
94	105	Shale
105	109	Coal 103.0 - 106.5
109	110	Shale
110	115	Coal 110.0 - 119.0
115	116	Shale
116	120	Coal
120	132	Shale
132	136	Sandstone
136	165	Shale 154.0 - 160.0
165	191	Sandstone
191	201	Shale with coal traces

Core Size

Hole No. RH 509

Page 1 of 2

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



# Diamond Drill Geological Log



Objective:

Sampled:

Logged By: \_\_\_\_\_ Date: \_\_\_\_\_

Composites:

Block:

Sect.:

Place:

App. Bear:

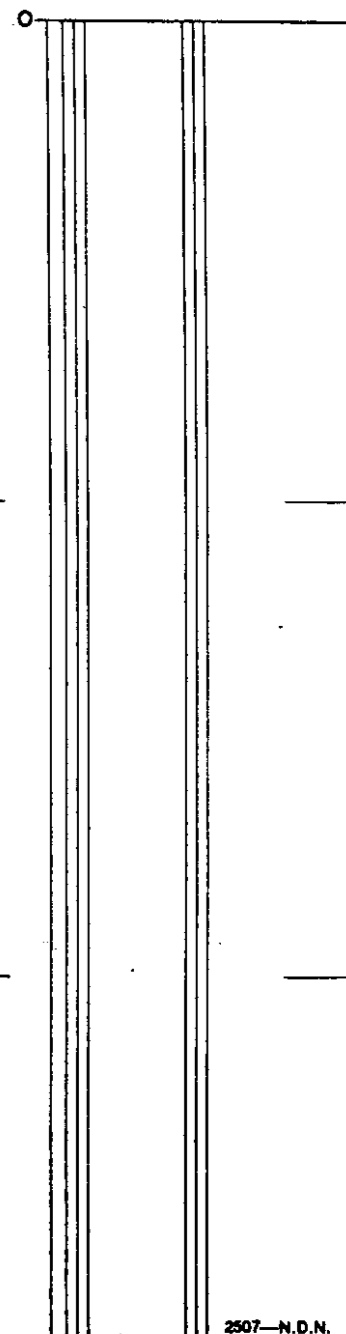
App.: Dip.:

Length:

From To Discard: Reason:

201	204	Sandstone	
204	209	Shale	
209	210	Sandstone	
210	214	Coal	
214	219	Sandyshale	
219	220	Coal	219.0 - 221.0
220	221	Shale	
221	222	Coal	
222	280	Sandstone	
280	301	Sandstone	
301	309	Shale	
309	326	Coal	
326	327	Shale	
327	334	Coal	
334	345	Shale	
345' END OF HOLE			

40 Scale  
Color Plot & Dips Ore Classes & Aver.



Core Size  
Hole No. **RH 509** Page 2 of 2

FORDING OPERATIONS  
DIAMOND DRILL SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
26.0	29.0	UPPER G RAW COAL				1.0	16.9	24.8	57.3	8½8½8½	.74	
		CLEAN COAL				1.0	8.5	26.9	63.6	8½,8,8	.78	Recovery 84.2%
34.0	40.0	UPPER G RAW COAL				0.9	14.7	24.4	61.0	8,8,7½	.77	
		CLEAN COAL				1.0	5.2	27.3	66.5	8,8,8½	0.79	Recovery 87.5%
210.0	214.0	MINOR RAW COAL				1.1	27.1	22.9	48.9	6½6½6½	1.02	
		CLEAN COAL				0.7	14.8	25.5	59.0	7½7½7½	1.04	Recovery 81.2%

# Diamond Drill Geological Log



K-FARONG 70(3)A-2

BECKER LOG

Objective:

Sampled:

**312**

Logged By: Date: **November 3, 1970**

Composites:

Block:

Sect.:

Place: *Green hills*

App. Bear:

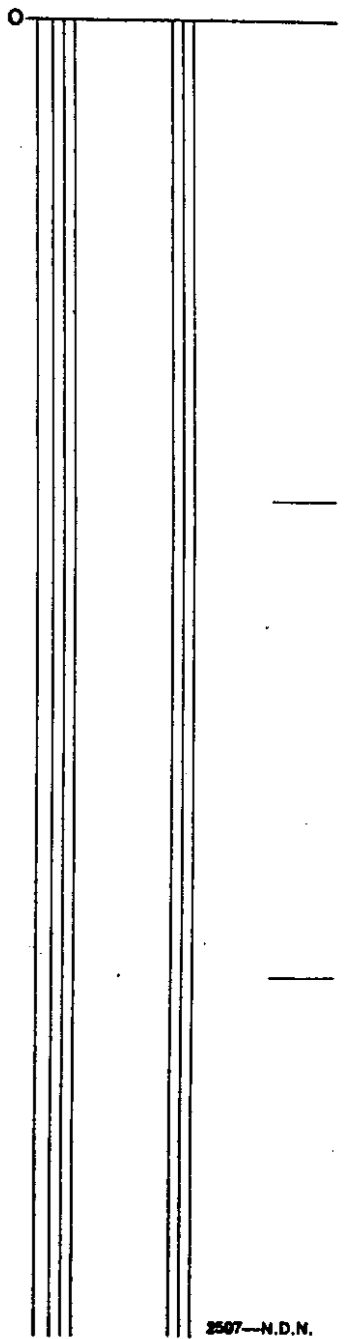
App. Dip.:

Length:

From	To	Discard:	Reason:
0	2	Overburden	
2	13	Sandstone	
13	17	Shale	
17	59	Sandstone	
59	61	Shale	
61	78	Sandstone	
78	84	Shale	
84	90	Sandstone	
90	94	Shale	
94	100	Coal	<i>96.0 - 100.0</i>
100	111	Shale	
111	112	Coal Stringer	
112	116	Coal	<i>115.0 - 117.0</i>
116	119	Shale	
119	130	Sandstone	
130	150	Shale	
150	166	Coal	<i>152.0 - 164.0</i>
166	176	Shale	
176	186	Sandstone	
186	189	Shale	
189	206	Sandstone	
206	215	Shale	
215	256	Sandstone	

*Revised by Radiation log.*

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



Core Size

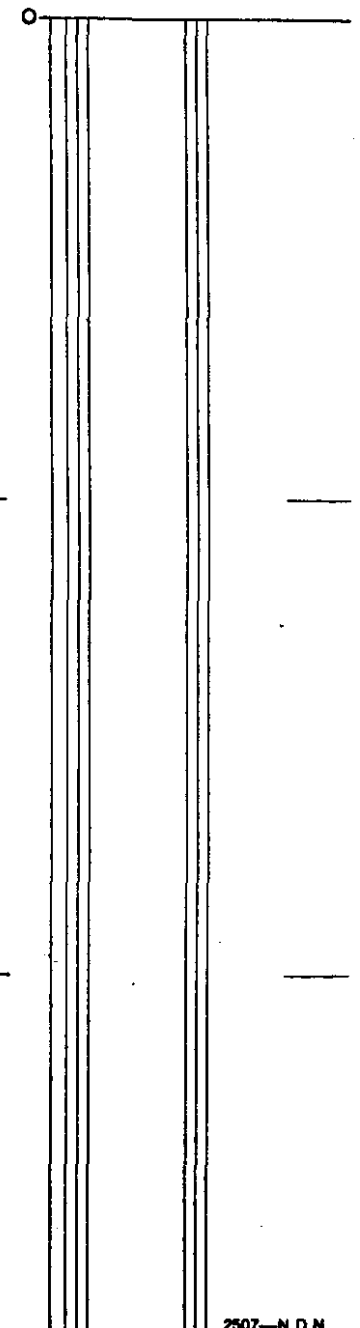
Hole No. RH 510

Page 1 of 3

# Diamond Drill Geological Log



Objective:		Sampled:				40 Scale	
Logged By:		Date:	Composites:		Color Plot & Dips		Ore Classes & Aver.
Block:	Sect.:	Place:	App. Bear.:	App. Dip.:	Length:		
From	To	Discard:	Reason:				
256	260	Shale					
260	273	Sandstone					
273	289	Shale					
289	291	Coal	289.5 - 294.5				
291	292	Shale					
292	294	Coal					
294	311	Shale with coal traces					
311	315	Sandstone					
315	328	Shale					
328	330	Sandstone					
330	335	Shale					
335	358	Sandstone					
358	378	Sandstone					
378	379	Shale					
379	381	Coal					
381	384	Shale					
384	387	Coal					
387	390	Shale					
390	393	Sandstone					
393	397	Coal	390.0 - 396.0				
397	413	Shale	410 - 412 = Coal stringer				
413	431	Shale					
431	437	Coal	431.0 - 440.0				



Core Size  
Hole No. RH 510  
Page 2 of 3



# Diamond Drill Geological Log



Objective:

Sampled:

Logged By:

Date:

Composites:

Block:

Sect.:

Place:

App. Bear:

App. Dip.:

Length:

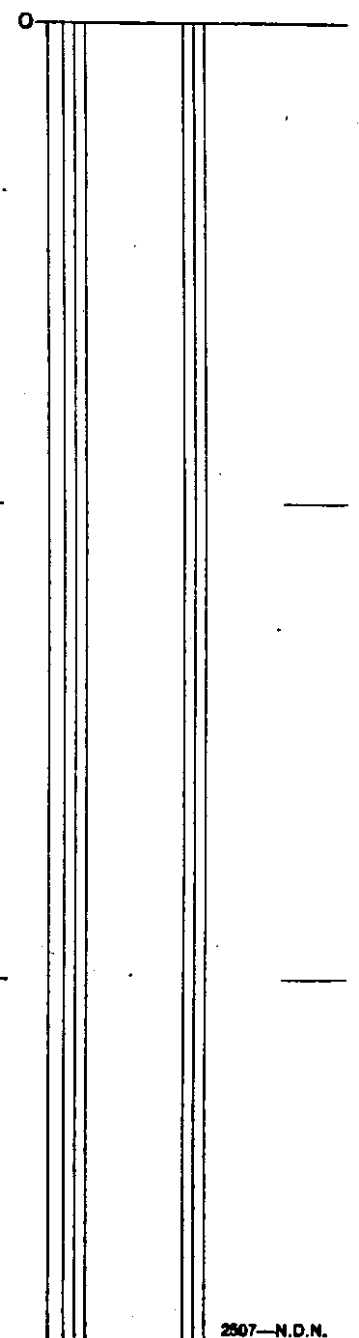
From	To	Discard:	Reason:
437	438	Shale	
438	441	Coal	
441	453	Shale	
453	457	Sandstone	
457	461	Shale	
461	472	Sandstone	
472	486	Shale	
486	488	Coal	482.0 - 488.0
488	495	Shale	
495	512	Sandstone	
512	515	Shale	
515	516	Sandstone	
516	519	Shale	
519	520	Coal	
520	521	Shale	
521	526	Sandstone	
526	539	Shale	
539	541.5	Coal	538.0 - 544.0
541.5	542	Shale	
542	545	Coal	
545	565	Shale	
565' End of Hole			

Core Size

Hole No. RH 510

Page 3 of 3

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



FORDING OPERATIONS  
DIAMOND DRILL SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	SHORTS FEET	WIDTH	M	A	VM	FC	FSI	S	REMARKS
94.0	100.0	MINOR SEAM				1.1	41.6	21.0	36.3	4 $\frac{1}{2}$ 4 $\frac{1}{2}$ 4 $\frac{1}{2}$	.55	
		CLEAN COAL				0.6	14.6	28.7	56.1	8 $\frac{1}{2}$ 8 $\frac{1}{2}$ 8 $\frac{1}{2}$	.85	Recovery 63.3%
289.0	291.0	PART H?				0.8	40.5	21.5	37.2	3 $\frac{1}{2}$ 3 $\frac{1}{2}$ 4	.47	
292.0	294.0	CLEAN COAL				0.6	12.8	27.7	58.9	8 $\frac{1}{2}$ 8,8,	.67	Recovery 47.0%
378.0	381.0	UPPER G				1.2	53.3	16.5	29.0	2.2.2	.33	
384.0	387.0	CLEAN COAL				0.7	12.8	26.2	60.4	7 $\frac{1}{2}$ ,7 $\frac{1}{2}$ ,7	.66	Recovery 47.3%
486.0	488.0	MINOR				0.9	21.5	24.3	53.3	7,7 $\frac{1}{2}$ ,7 $\frac{1}{2}$	.71	
		CLEAN COAL				0.6	9.9	28.0	61.6	8 $\frac{1}{2}$ 8 $\frac{1}{2}$ 8 $\frac{1}{2}$	.83	Recovery 80.3%
539.0	545.0	MINOR				0.7	46.9	18.0	34.4	4,4,4,	.55	
		CLEAN COAL				0.7	17.8	24.8	56.7	8 $\frac{1}{2}$ ,8,8,	.75	Recovery 43.7%

# Diamond Drill Geological Log

BECKER DRILL LOG



K-FROING 70(3)A-2

**312**

Objective:

Sampled:

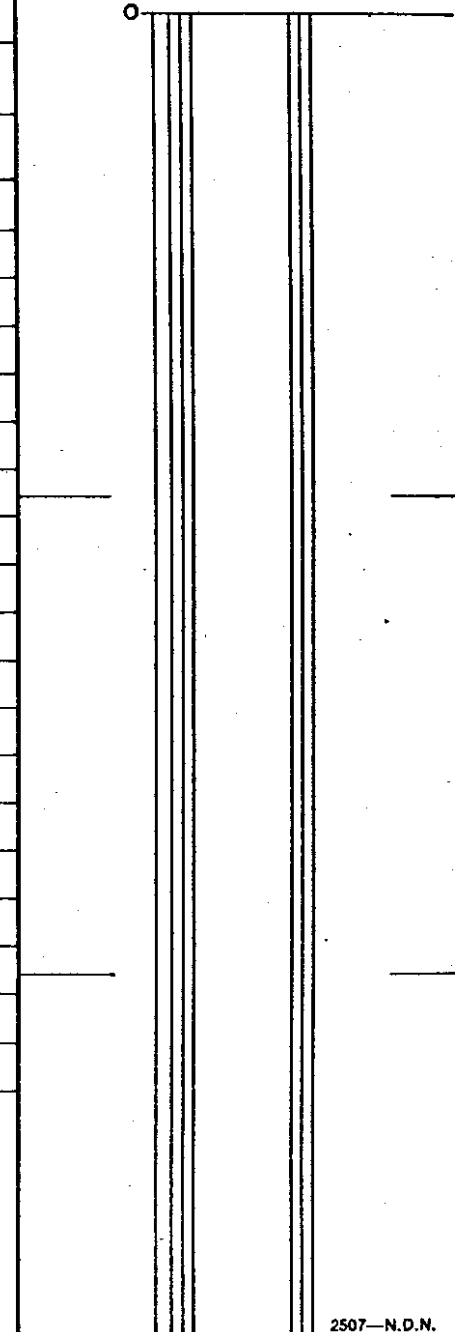
Logged By: Date: November 12, 1970

Composites:

Block: Sect.: Place: *Green hills* App. Bear: App.: Dip.: Length:

From	To	Discard:	Reason:
0	14	Overburden	
14	23	Shale	
23	55	Sandstone	
55	97	Shale	
97	100	Sandstone	
100	102½	Coal	104.0 - 109.0
102½	109	Shale	
109	112	Coal	112.0 - 118.0
112	176	Sandstone	
176	182	Shale	
182	196	Coal	183.0 - 194.0
196	198	Shale	
198	206	Sandstone	
206	215	Shale	207.0 - 210.0
215	242	Sandstone	
242	243	Shale	
243	245	Sandstone	
245	246	Shale	
246	252	Sandstone	
252	254	Shale	
254	256	Coal	254.0 - 257.0
256	261	Sandstone	
261	263	Coal	260.0 - 269.0

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



Core Size 3 7/8"

Hole No. RH 511

Page 1



FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
100.0	102.5	MINOR ABOVE "H" RAW COAL					0.6	45.9	24.6	28.9	4,4,4 $\frac{1}{2}$	.71	
		CLEAN COAL					0.6	20.8	29.4	49.2	8,8 $\frac{1}{2}$ ,8	.82	Recovery 64.5%
109.0	112.0	MINOR ABOVE "H" RAW COAL					0.3	23.7	29.3	46.7	8,7 $\frac{1}{2}$ ,7 $\frac{1}{2}$	.89	
		CLEAN COAL					0.7	15.2	29.1	55.1	8 $\frac{1}{2}$ ,9,9	.80	Recovery 77.2%
182.0	196.0	SEAM "H" RAW COAL					0.5	31.7	23.1	44.7	7,6 $\frac{1}{2}$ ,6 $\frac{1}{2}$	.47	
		CLEAN COAL					0.6	12.2	27.9	59.3	8,8,8	.58	Recovery 59.9%
254.0	255.0	MINOR BELOW "H" RAW COAL					0.5	54.0	16.7	28.8	2 $\frac{1}{2}$ ,3,3	.58	
		CLEAN COAL					0.5	23.9	24.8	50.8	8,7 $\frac{1}{2}$ ,7 $\frac{1}{2}$	.71	Recovery 53.0%
261.0	263.0	MINOR RAW COAL					0.2	22.8	23.7	53.3	5 $\frac{1}{2}$ ,6,5 $\frac{1}{2}$	.74	
		CLEAN COAL					0.5	11.4	26.6	61.4	7,6 $\frac{1}{2}$ ,7	.82	Recovery 85.3%

FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION		SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
331.0	336.0	UPPER "G"	RAW COAL					0.4	37.2	20.9	41.5	5,5,5	.74	
			CLEAN COAL					0.5	11.2	27.1	61.2	8,8,8	.82	Recovery 60.9%
369.0	374.0	}	"G"					0.2	37.5	21.6	40.7	4 $\frac{1}{2}$ ,5,5	.55	
375.0	378.0			CLEAN COAL					0.4	16.7	26.9	56.0	8 $\frac{1}{2}$ ,8,8	.77
425.0	429.0	MINOR BELOW "G"	RAW COAL					0.2	25.7	23.5	50.6	8,8,8	.74	
			CLEAN COAL					0.5	8.3	27.4	63.8	8 $\frac{1}{2}$ ,9,9	.83	Recovery 77.1%

# Diamond Drill Geological Log

BECKER DRILL LOG



K-FACING 70(31A-2)

Objective:

Sampled:

Logged By: Date: November 16/70

Composites:

**312**

Block:

Sect.:

Place: GREENHILLS

App. Bear:

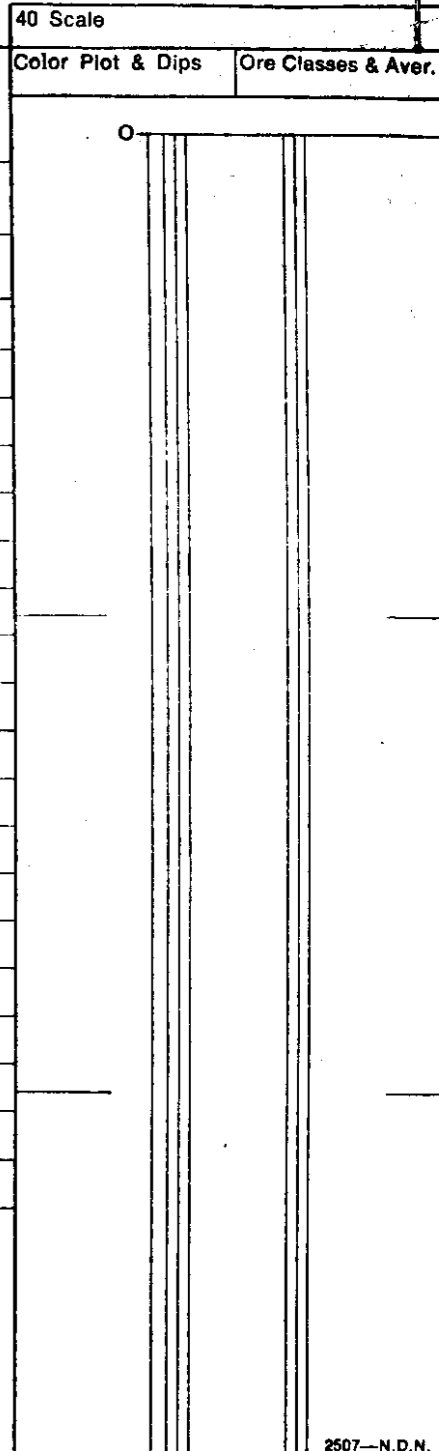
App.: Dip.:

Length:

From To Discard: Reason: *Revised by radiation log*

0	6	Overburden	
6	50	Shale	
50	51	Coal stringer	
51	70	Shale	
70	72	Coal	<i>70.0 - 76.0</i>
72	89	Shale	
89	117	Sandstone	
117	127	Sandy shale	
127	132	<del>Sandstone</del> Shale	
132	136	Sandstone	
136	140	Shale and coal	<i>136.6 - 147.0</i>
140	146	Coal	
146	170	Sandstone	
170	174	Shale	
174	176	Coal	<i>175.0 - 177.0</i>
176	188	Shale	
188	194	Coal	
194	195	Shale	
195	214	Sandstone	
214	215	Shale	
215	340	Sandstone	
340	351	Shale	<i>341.0 - 343.0</i>
351	355	Sandstone	

Core Size 3 7/8"  
 Hole No. RH. *512*  
 Page 1 of 2



# Diamond Drill Geological Log



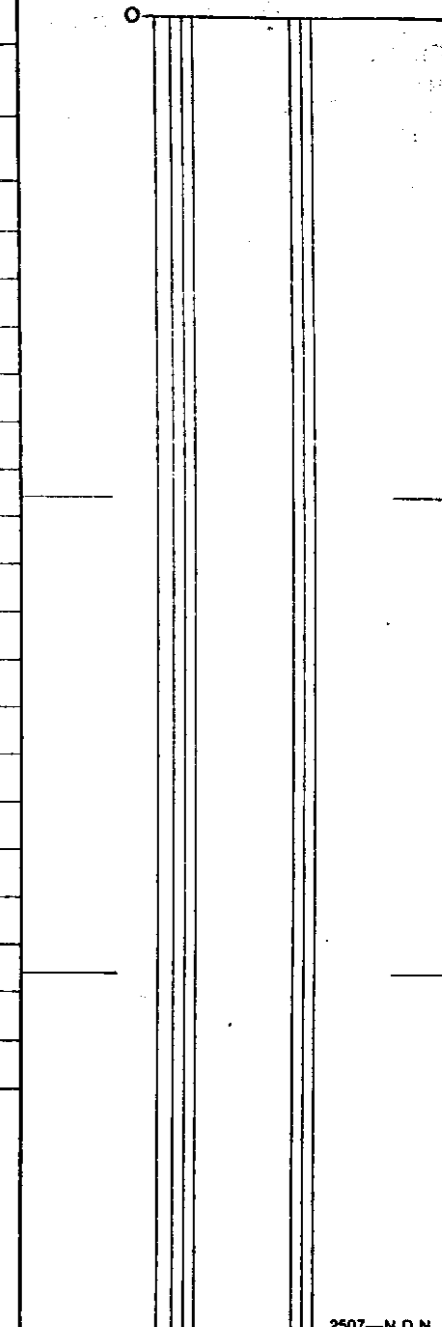
40 Scale

Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_  
 Color Plot & Dips \_\_\_\_\_ Ore Classes & Aver. \_\_\_\_\_

Logged By: \_\_\_\_\_ Date: \_\_\_\_\_ Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From	To	Discard:	Reason:
355	362	Shale	
362	403	Sandstone	
403	410.5	Coal	402.0 - 410.0
410.5	413	Shale	
413	416	Sandstone	
416	420	Shale	
420	422	Sandstone	
422	425	Shale	
425	427	Sandstone	
427	438	Shale	
438	439	Coal	436.0 - 438.0
439	440	Shale	
440	445	Sandstone	
445	453	Shale	
453	500	Sandstone	
500	506	Coal	498.0 - 504.0
506	522	Sandstone	
		END HOLE	November 25/70




Core Size \_\_\_\_\_  
 Hole No. RH. ~~512~~ <sup>512</sup>  
 Page 2 of 2



# Diamond Drill Geological Log



K-FORING 70131A-2

## BECKER DRILL LOG

Objective:

Sampled:

**312**

Logged By:

Date: **November 26/70**

Composites:

Block:

Sect.:

Place: **GREENHILLS**

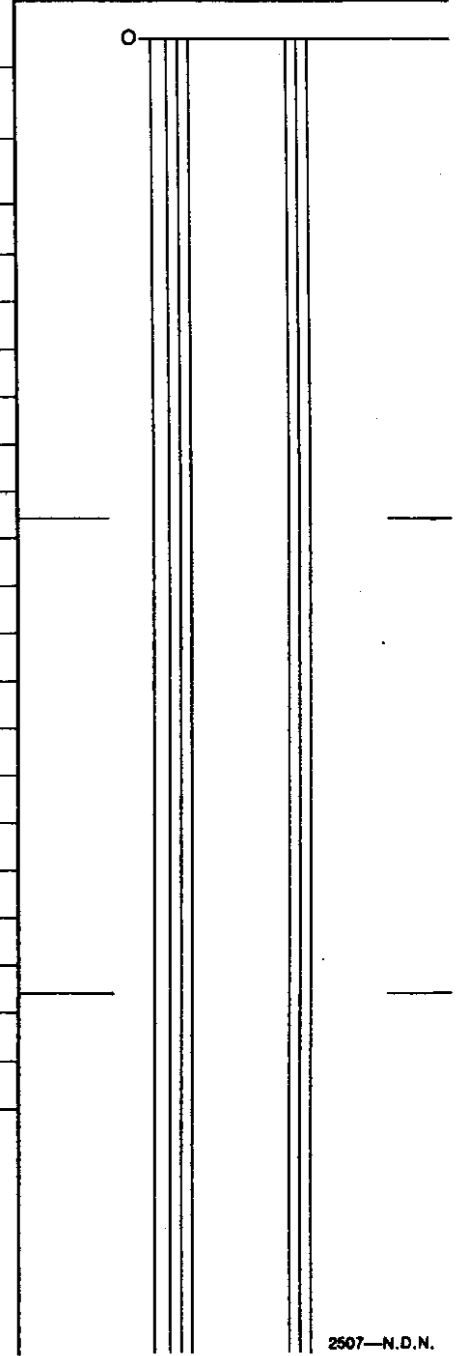
App. Bear:

App. Dip.:

Length:

From	To	Discard:	Reason:
0	8	Overburden	
8	50	Shale	
50	164	Sandstone	
164	165	Shale	
165	166	Coal	
166	171	Sandstone	
171	197	Shale	
197	213	Sandstone	
213	215	Coal	211.0 - 215.0
215	219	Shale	
219	224	Coal	
224	227	Sandstone	
227	230	Coal	228.0 - 230.0
230	270	Sandstone coal stringers at 197' and 211'	237.0 - 239.0
270	272	Shale	
272	277	Coal	272.0 - 278.0
277	287	Shale	
287	289	Coal	283.0 - 289.0
289	308	Shale	298.0 - 302.0
308	332	Sandstone	
332	355	Shale	
355	411	Sandstone	
411	418	Coal	409.0 - 418.0

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



Core Size **3 7/8"**

Hole No. **R.H. 513**

Page **1** of **2**





# Diamond Drill Geological Log



K - FROGNE 70(3)A-2

M & M DRILL LOG

Objective:

Sampled:

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.

Logged By: Date: December 1970

Composites:

312

Block: Sect: Place: App. Bear: App.: Dip.: Length:  
GREENHILLS

From	To	Discard:	Reason:
0	22	Overburden	<p>Revised by Radiation log</p> <p><b>NOT SAMPLED</b></p> <p><b>- SINGLE WALL PIPE</b></p>
22	28	Shale	
28	32	Sandstone	
32	48	Shale, coal stringers	
48	51	Shale	
51	55	Sandstone	
55	80	Sandstone traces coal	
80	81	Traces coal	
81	100	Shale (hard)	
100	108	Shale and sandstone	
108	116	Sandstone (hard)	<p>117.5 - 143.0</p>
116	144	Coal	
144	156	Shale	<p>167.0 - 170.0</p>
156	162	Coal	
162	168	Shale (soft)	
168	170	Coal	<p>177' END HOLE</p>
170	177	Shale	

Core Size 4 1/2"

Hole No. RH. 514

Page 1

# Diamond Drill Geological Log



K-Forewing 70(3)A-2

M & M DRILL LOG

Objective:

Sampled: **312**

Logged By: Date: December 16/70

Composites:

Block:

Sect.:

Place: GREENHILLS

App. Bear:

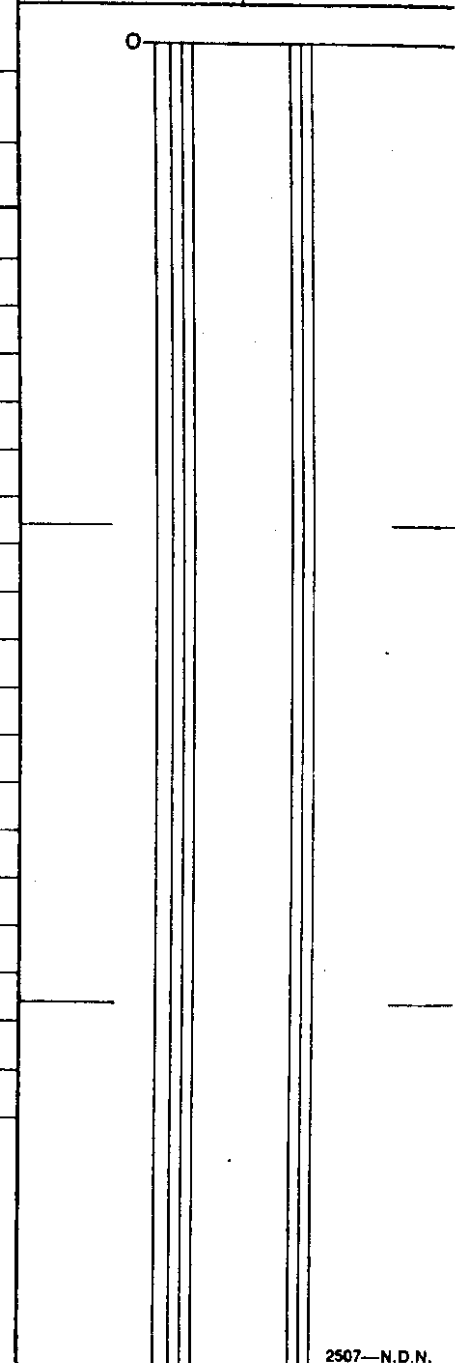
App.: Dip.:

Length:

From	To	Discard:	Reason:
0	26	Overburden	<b>NOT SAMPLED</b> <b>- SINGLE WALL PIPE</b>
26	70	Shale	
70	105	Shale	
105	161	Shale	
161	175	Shale	
175	229	Shale	

229 END HOLE

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



Core Size 4 1/2"

Hole No. RH. 515

Page 1

# Diamond Drill Geological Log

M & M DRILL LOG



K-FIELDING 70(3)A-2

Objective:

Sampled:

40 Scale

Logged By: Date: December 18/70

Composites:

312

Color Plot & Dips Ore Classes & Aver.

Block: Sect.: Place: GREENHILLS App. Bear: App.: Dip.: Length:

From	To	Discard:	Reason:
0	13	Overburden	<p style="text-align: center;"><b>NOT SAMPLED</b></p> <p style="text-align: center;"><b>- SINGLE WALL PIPE</b></p>
13	40	Sandstone - hard	
40	45	Sandstone	
45	95	Shale	
95	119	Coal	
119	148	Shale	
148	163	Shale, traces of coal	
163	177	Coal, shale bands	
177	183	Shale, traces of coal	
183	197	Coal	
197	221	Shale	<p style="text-align: right;"><i>Revised by radiation log</i></p>
221	230	Coal	
230	263	Sandstone	
263	267	Coal	
267	269	Shale	
269	272	Coal	
272	311	Shale	

95.0 - 118.0

193.0 - 198.0

222.5 - 228.0

311' END HOLE

Core Size 1 1/2"

Hole No. RH. 516

Page 1

# Diamond Drill Geological Log



K - FOREING 70(3)A-2

M & M DRILL LOG

Objective:

Sampled: **312**

Logged By: Date: December 19/70

Composites:

Block: Sect.: Place: App. Bear: App. Dip.: Length:

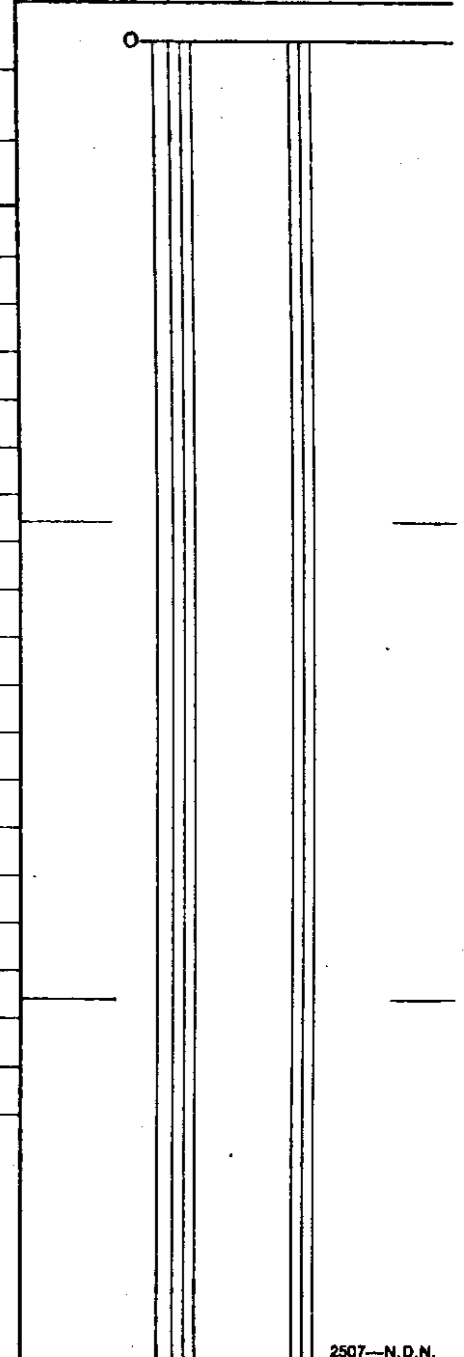
GREENHILLS

From To Discard: Reason:

0	20	Overburden	<b>NOT SAMPLED - SINGLE WALL PIPE</b>
20	69	Sandstone	
69	74	Coal 68.0 - 74.0	
74	80	Shale	
80	98	Sandstone	
98	130	Coal	
130	206	Sandstone	
206	240	Coal 205.0 - 232.0	
240	247	Shale 238.0 - 240.0	
247	302	Sandstone	

302' END HOLE

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.



Core Size 4 1/2"

Hole No. RH. 517

Page 1

# Diamond Drill Geological Log



K- FOREING 70(3)A-2

312

Objective:

Sampled:

Logged By: A.C.T.

Date: Sept. 11/70

Composites:

Block:

Sect:

Place: *Turnbull*

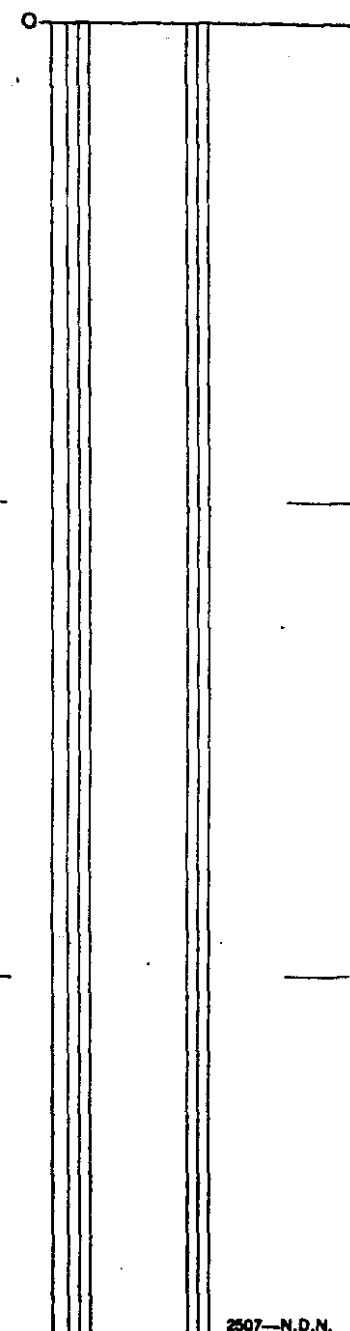
App. Bear:

App. Dip:

Length:

From	To	Discard:	Reason:
			<i>Revised by Radiation Log</i>
0.0	21.0	Cased, overburden	
21.0	23.0	Rubbly, bedrock	
23.0	34.0	Mudstone, occasional T.B. 1" - 2" s.s. interbedded.	
34.0	37.0	Interbd. s.s. (f.gr.) and mudstone to fine silt, lentic and x-bd. s.s.	
37.0	51.0	same as prev., alternating 4-5 ft. mudstone and equiv. of interbd. mudstone and s.s. gen. bdg. L 73° to core - many lentic and swirly bdg. in s.s. Gord core	
51.0	63.0	60:40 x-bd. s.s. and finely lamin. mudst. Swirly bdg. ammonin s.s.	
63.0	69.0	Mnly, mdstone, hily fract., 66.5 - 69.0, 1 ft. short.	
69.0	77.0	Coal, top 3' bony & gen. poor quality, also shattered. 69-72 = 1' short 72-77° bright, hi-vol. prob. 72-77° 1° ft. short.	<i>68.0 - 75.0</i>
77.0	81.0	Mudstone, few vithin coaly streaks	
81.0	86.0	Bone coal and coaly mudstone. Poor qual., high ash 1.° short.	<i>80.0 - 83.0</i>
86.0	88.0	Mdstone with interbd. 3"-4" coal bands. Sampled No shorts.	
88.0	127.0	Interbd. s.s. and mdstone - 91.° then mnly mudstone with occasional 6" to 1ft. sections of t.b. s.s. lenticular bds. to approx. 118 ft. 118 - 127° mostly x bd. s.s., minor mudstone interbds.	
127.0	136.0	Coal, bony @ top for 1 ft and shaly 132 - 132.5 1.0 short	<i>125.5 - 133.0</i>
136.0	154.0	T.b. and X-bd. to massive thick bd. m.gr. grey s.s.	Core Size
154.0	179.5	Tib. interbd. s.s. and mdstone, fairly reg. bdg. @ 63° to core axis - coaly stks. in s.s. along occas. bdg. planes	HQ
179.5	233.0	Mnly mudstone with irreg. lenses & swirly t. bd. - sections of s.s.	Hole No. 600

40 Scale  
Color Plot & Dips  
Ore Classes & Avcs.





# Diamond Drill Geological Log

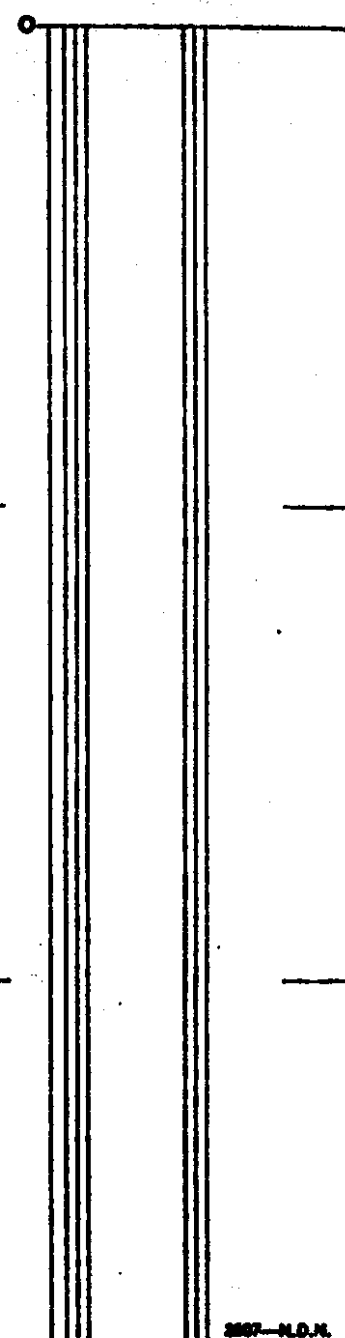


Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_  
 Logged By: \_\_\_\_\_ Date: \_\_\_\_\_ Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App. Dip: \_\_\_\_\_ Length: \_\_\_\_\_

From	To	Discard:	Reason:	App. Dip:	Length:
233.0	234.5		Carbonaceous mudstone and "bone", high silt content. Not sampled		
234.5	241.0		Coal, shale 236-36.5, broken and 1.5 ft. short. Gen. poor quality	232.0 - 236.0	
241.0	261.0		Mnly. mudstone with sporadic sections of tib s.s. interbedded with mudstone	258.0 - 262.0	
		247 - 261.0	core discarded		
261.0	264.8		Coal, fair quality 0.3 ft. short.		
264.8	266.4		Mudstone		
266.4	267.0		Coal, not sampled		
267.0	325.7		Dark mudstone, faintly laminated		
			- vilocal sandy sections with slump 275 - 289 core discarded also 289 - 303		
			and lode cast features evident, partic. 299 - 305 <sup>o</sup> & 303 - 317		
325.7	330.0		Bone coal mnly, shaly in middle bone @ top & btm. 0.5 ft. short.	322.0 - 322.5	
330.0	342.5		Mudstone, v. local thin coaly streaks		
342.5	357.5		Coal, bright and mud-hard 1.5 ft. short.	340.0 - 355.0	
		355 - 356	shale and minor coal partings		
357.5	399.0		Mnly. Mudstone, occasional 1" to 4" coal partings		
			Mnly reg. bd. but load casts, flame struct. ball and pillow struct. present in siltier beds.		
			- from 385 - t.b. siltstone to figr. s.s. interbd. with mudst.		

40 Scale  
 Color Plot & Dips  
 Ore Classes & Aver.



Core Size  
 Hole No. 600  
 Page 2

# Diamond Drill Geological Log



Objective: \_\_\_\_\_ Sampled: \_\_\_\_\_

Logged By: \_\_\_\_\_ Date: \_\_\_\_\_ Composites: \_\_\_\_\_

Block: \_\_\_\_\_ Sect.: \_\_\_\_\_ Place: \_\_\_\_\_ App. Bear: \_\_\_\_\_ App. Dip.: \_\_\_\_\_ Length: \_\_\_\_\_

From	To	Discard:	Reason:	
399.0	406.0	Coal, broken and only 4' recov.	3 ft. short	396.0 - 406.0
406	410	Coal 95%	Recovery	
410	439	Mudst. alternating with siltstone and fine grained		424.0 - 428.0
439	445.6	SST. current bedded. 50° to C.A.	429-429.7 narrow coal band	435.0 - 442.0
439	445.6	Coal dirty one 6" shale parting at 442'	60% recovery	
445.6	455.6	Mudst.		451.0 - 458.0
455.6	457	Coal		
457	462	Carbonaceous mudst. and several narrow coal bands		
462	475	Mudst. and fine grained SST. alternating 48° to CA		
475	475.5	Vitrain Band		
475.5	565	Mudst. alternating with fine grained current bedded SST.		
		484 - 485.2 narrow vitrain band. 45° to Core axis towards base of unit the current bedded SSTs.		
		begin to predominate over the mudstones. 518 - 521 core is brecciated with calcite in filling.		
		Overall Dip of unit 45° to C.A. End of hole		

Core Size  
HQ

Hole No. 600

Page 3

40 Scale  
Color Plot & Dips  
Ore Classes & Aver.

FORDING OPERATIONS  
DRILL HOLE SAMPLING RECORD

FROM	TO	DESCRIPTION	SAMPLE NUMBER	LAB. No.	SHORTS	WIDTH	INH M	A	VM	FC	FSI	S	REMARKS
69.0	77.0	UPPER PART "13"					0.7	25.8	23.4	50.1	6½, 7, 7	.74	
		CLEAN COAL					1.0	8.0	27.5	63.4	8½, 8½, 9	.70	Recovery 63.8%
81.0	88.0	PART 13					0.7	25.8	25.3	48.2	8, 8, 8	.66	
		CLEAN COAL					1.0	4.9	29.3	64.8	8½, 9, 9	.84	Recovery 66.8%
261.0	264.8	MINOR					0.6	19.4	23.0	56.3	7½, 7½, 7½	.85	
		CLEAN COAL					1.1	10.0	25.1	63.8	8, 8, 7½	.77	Recovery 31.6%
347.5	357.5	SEAM 12					0.6	26.1	22.0	51.3	6, 6½, 6½	.71	
							1.0	8.0	25.4	65.6	8, 8½, 8½	.63	Recovery 66.1%
399.0	410.0	SEAM 7					0.6	19.8	23.6	56.0	7½, 7, 7½	.80	
		CLEAN COAL					1.0	8.8	25.7	64.5	8, 8½, 8½	.80	Recovery 78.4%

# Diamond Drill Geological Log



K-FORING 70(3)A-2

312

Objective:		Sampled:		40 Scale	
Logged By: ACM		Date: Sept. 1/70		Color Plot & Dips	
Block: W		Sect:		Ore Classes & Aver.	
Place: Turnbull		App. Bear:		Length:	
Composites:		App.: Dip:		Reason:	
From	To	Discard:			
		Revised by radiation log			
0	30	Overburden			
30	57	SST. Med. grained current bedded, overall redding 90° to C.A.			
57	84	Siltstone predominantly with sandy horizons, numerous calcite stringers along and across bedding. Dip 45° to C.A.			
84	205.0	Mudstone slightly carbonaceous, brecciated and slickensided 202.0 - 206.0 Coal			
		- locally well laminated silty sections			
		140 - 143 highly fractured, also 150 - 155.5			
		v. minor slickensided coal 161 - 161.5 Bdg. L fairly regular 45° to axis			
		183 - 186 slickensided, graphitic fracture surfaces @ 35°, same as bdg.			
		191 - 191.5 coal, 197 - 200 carbonaceous mdst.			
205	208.5	Coal, 2 ft. recovered. Good quality vitrain rich.			
		219 - 221 fract. carbonaceous shale & coal			
208.5	246.0	Dark, mudstone locally fractured as & 234 - 235 badly fract. here. Few coal strks.			
246.0	248.5	Coal, crumbly but 95% recovery			
248.5	251.5	Mudstone, mod-fract.			
251.5	253.0	Coal, pulverized. Approx. 0.3 short			
253.0	301.5	Dark mudstone good core - Massive except for local lam. sections. Exc. lams. 297.5 - 301.5			
301.5	321.0	Sandstone c.gr. t.b. & laminated, lt. & dark alt. thin bds			
		Gen. Bdg. @ 301.5 @ 70° dip to core axis, x-bdg evident			
		thruout			
		Core Size		Hole No. 601	
		HQ		Page 1	

# Diamond Drill Geological Log



Objective:		Sampled:		40 Scale	
Logged By:		Date:		Composites:	
Block:	Sect.:	Place:	App. Bear:	App. Dip.:	Length:
From	To	Discard: Reason:			
321.0	407	Dark mudstone, gradations to siltstone locally			
		333 - 335 f.gr. s.s. tib.			
		350 - 350.5 crushed coal strg., blocky core gen. but v. good recovery			
		369 - 371 sandy interbeds, 371 - 376.0 f.ss. to siltstone interbeds			
		393.3 - 394 Crushed coal			
		394 - 407 Same dark mudstone faintly lam.			
		407.0 END			
			Core Size		
			Hole No.		
			601		
			Page		
			2		

