

LATITUDE 37° 45' 00"

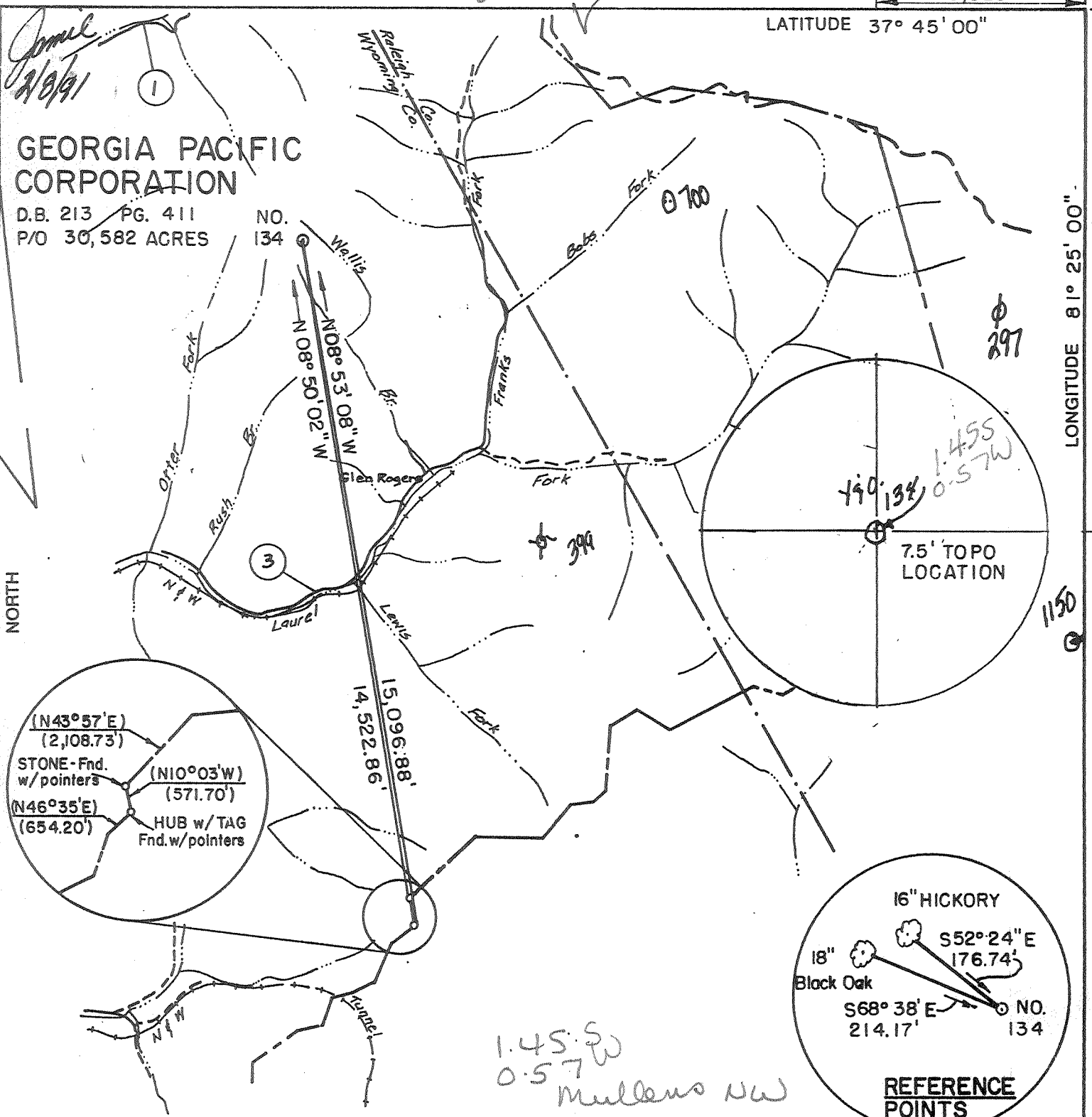
3,025'

LONGITUDE 81° 05' 00"

7,550'

# GEORGIA PACIFIC CORPORATION

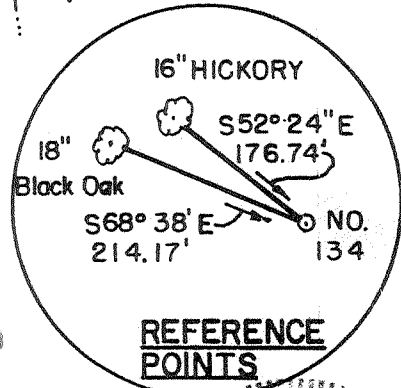
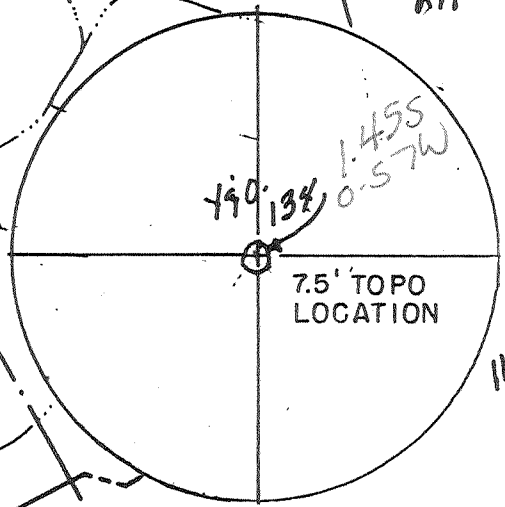
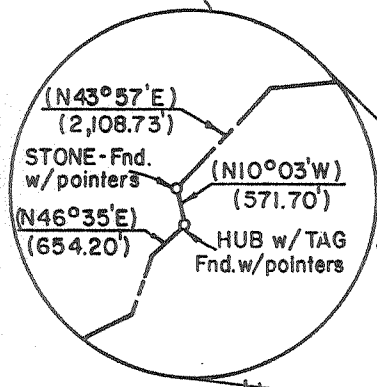
D.B. 213 PG. 411 NO. 134  
P/O 30,582 ACRES



NORTH

1

3

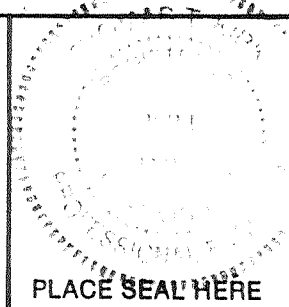


1.45 SW  
0.57 W  
Mullens NW

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 3000'  
 MINIMUM DEGREE OF ACCURACY 1:2500  
 PROVEN SOURCE OF ELEVATION U.S.G.S. BM NO. Z180  
 EL. 1785.55 LOCATED 1000 ± S/W OF GLEN ROGERS HIGH SCHOOL

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENERGY.  
 (SIGNED) Thomas E. Kutz  
 R.P.E. 3698 L.L.S. \_\_\_\_\_



## STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY OIL AND GAS DIVISION



DATE APRIL 9, 19 90  
 OPERATOR'S WELL NO. Y & O COAL NO. 134  
 API WELL NO. \_\_\_\_\_

47 - 109 - 1184  
 STATE COUNTY PERMIT

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X  
 LOCATION: ELEVATION 2641 WATERSHED WALLIS BRANCH  
 DISTRICT SLAB FORK 7 COUNTY WYOMING  
 QUADRANGLE MCGRAWS 7.5'

SURFACE OWNER GEORGIA - PACIFIC CORP. ACREAGE 30,582  
 OIL & GAS ROYALTY OWNER Y & O COAL CO. et al LEASE ACREAGE 30,582

LEASE NO. \_\_\_\_\_  
 PROPOSED WORK: DRILL X CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION X OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_

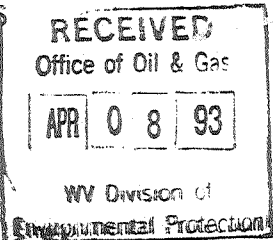
PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION BIG LIME ESTIMATED DEPTH 3700'  
 WELL OPERATOR SONAT EXPLORATION CO. DESIGNATED AGENT DANA BLACKSHIRE  
 ADDRESS P.O. BOX 1513 ADDRESS P.O. BOX 766  
HOUSTON, TX 77251-1513 CHARLESTON, WV 25323

COUNTY NAME

PERMIT

H.T. HALL 98673 FORM WW-6

R-35



08-Feb-91  
API # 47-109-01184

State of West Virginia  
DEPARTMENT OF ENERGY  
Division of Oil and Gas

Well Operator's Report of Well Work

Farm name: GEORGIA-PACIFIC CORP. Operator Well No.: Y & O 134

LOCATION: Elevation: 2641.00 Quadrangle: MCGRAWS

District: SLAB FORK County: WYOMING  
Latitude: 7550 Feet South of 37 Deg. 45Min. 0 Sec.  
Longitude 3025 Feet West of 81 Deg. 25 Min. 0 Sec.

Company: SONAT EXPLORATION CO.  
P. O. BOX 1513  
HOUSTON, TX 77251-1513

Agent: DANA R. BLACKSHIRE

Inspector: RODNEY G. DILLON  
Permit Issued: 02/08/91  
Well work Commenced: 6/17/91  
Well work Completed: 8/23/91  
Verbal Plugging  
Permission granted on: \_\_\_\_\_  
Rotary x Cable \_\_\_\_\_ Rig \_\_\_\_\_  
Total Depth (feet) 3715'  
Fresh water depths (ft) 1050  
Salt water depths (ft) 1550

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
13 3/8	30'	30'	surface
8 5/8	1768'	1768'	surface
1 1/2	3216'		Tubing
4 1/2	3658'	3658'	TOC 1924'

Is coal being mined in area (Y/N)? N  
Coal Depths (ft): \_\_\_\_\_

OPEN FLOW DATA

Producing formation Big Lime Pay zone depth (ft) 3212-3260  
Maxon 2574-2750  
Ravencliff 2179-2206  
 Gas: Initial open flow 444 MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
 Final open flow 370 MCF/d Final open flow \_\_\_\_\_ Bbl/d  
 Time of open flow between initial and final tests 48 Hours  
 Static rock Pressure 370 psig (surface pressure) after 10 days Hours

Second producing formation \_\_\_\_\_ Pay zone depth (ft) \_\_\_\_\_  
 Gas: Initial open flow \_\_\_\_\_ MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
 Final open flow \_\_\_\_\_ MCF/d Final open flow \_\_\_\_\_ Bbl/d  
 Time of open flow between initial and final tests \_\_\_\_\_ Hours  
 Static rock Pressure \_\_\_\_\_ psig (surface pressure) after \_\_\_\_\_ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: Bruce Heath  
SONAT EXPLORATION CO.

Reviewed TMG  
Recorded \_\_\_\_\_

By: Bruce Heath  
Date: 9/30/91

APR 20 1992

109 1184

## 1. Details of Perforated Intervals, Fracturing or Stimulating, Physical Change, etc.

Big Lime Perf 3212-25' & 3233-60'. Acidize w/10,000 gal 15% HCl acid + additives & 12,180 gal gel wtr. Pumped N2 @ 350-175 scf/bbl. Total 137,000 scf.

Maxon Perf 2750-74'. Dump 500 gals 15% HCl + additives. Used 45,000 scfm N2. Foam frac w/37,600 gals 75Q foam & 78,000# 20-40 sd. Used 615,000 scf nitrogen.

Ravencliff Perf 2179-81'; 2196-98' & 2204-06'. Pumped 500 gals 15% HCl + additives. Frac'd w/32,700 gals 90Q & 75Q. 48,637# 20-40 sd.

## 2. Geological record of all formation.

<u>Formation</u>	<u>Top Feet</u>	<u>Bottom Feet</u>
Coal	141	144
Coal	240	243
Coal	520	523
Coal	907	913
Coal	976	981
Coal	1070	1075
Coal	1382	1390
Coal	1693	1698
Coal	2022	2090
Princeton	2178	2220
Ravencliff	2220	2258
Avis	2636	2860
Maxon	3015	3201
Little Lime	3201	3588
Big Lime	3723'	
TD:		

DR 370

DFT 345

Y & O COAL #134  
API #: 47-109-01184

Production Tests by Individual Zones:

<u>Zone</u>	<u>Flow Rate</u>	<u>% of Total</u>
Big Lime	199 MCFD	44.32
Maxon	123 MCFD	27.39
Ravencliff	<u>127 MCFD</u>	<u>28.29</u>
Total	449 MCFD	100.00%

8348



1) Date: April 9, 1990  
2) Operator's well number  
Y & O Coal No. 134  
3) API Well No: 47 - 109 - 1184  
State - County Permit

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS  
NOTICE AND APPLICATION FOR A WELL WORK PERMIT

JAN 23 91

4) Surface Owner(s) to be served:  
(a) Name Georgia Pacific Corp.  
Address P. O. Box 105605  
Atlanta, GA 30348  
(b) Name \_\_\_\_\_  
Address \_\_\_\_\_  
(c) Name \_\_\_\_\_  
Address \_\_\_\_\_

5) (a) Coal Operator:  
Name \_\_\_\_\_  
Address \_\_\_\_\_  
(b) Coal Owner(s) with Declaration  
Name Youghiogheny & Ohio Coal Co.  
Address 328 North Lake Drive  
Prestonburg, KY 41653  
Name Bellemead Coal Co.  
Address c/o Trust Dept., Charleston Nat'l Bar  
Chas. Nat'l Plaza, Box 1113, Chas., WV 25301

6) Inspector Rodney Dillon  
Address P. O. Box 1526  
Sophia, WV 25921  
Telephone (304) - 683-3989

(c) Coal Lessee with Declaration  
Name Ranger Fuel Corp.  
Address P. O. Box 966  
Beckley, WV 25802-0966

TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

\_\_\_\_\_ Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas OR  
X Included is the information required by Chapter 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through 7 on the above named parties, by:

- \_\_\_\_\_ Personal Service (Affidavit attached)
- X Certified Mail (Postmarked postal receipt attached)
- \_\_\_\_\_ Publication (Notice of Publication attached)

I have read and understand Chapter 22B and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator Sonat Exploration Company  
By: [Signature]  
Its: \_\_\_\_\_ Designated Agent  
Address \_\_\_\_\_ P. O. Box 766  
\_\_\_\_\_ Charleston, WV 25323  
Telephone \_\_\_\_\_ (304) 925-0317

Subscribed and sworn before me this 12th day of April, 1990

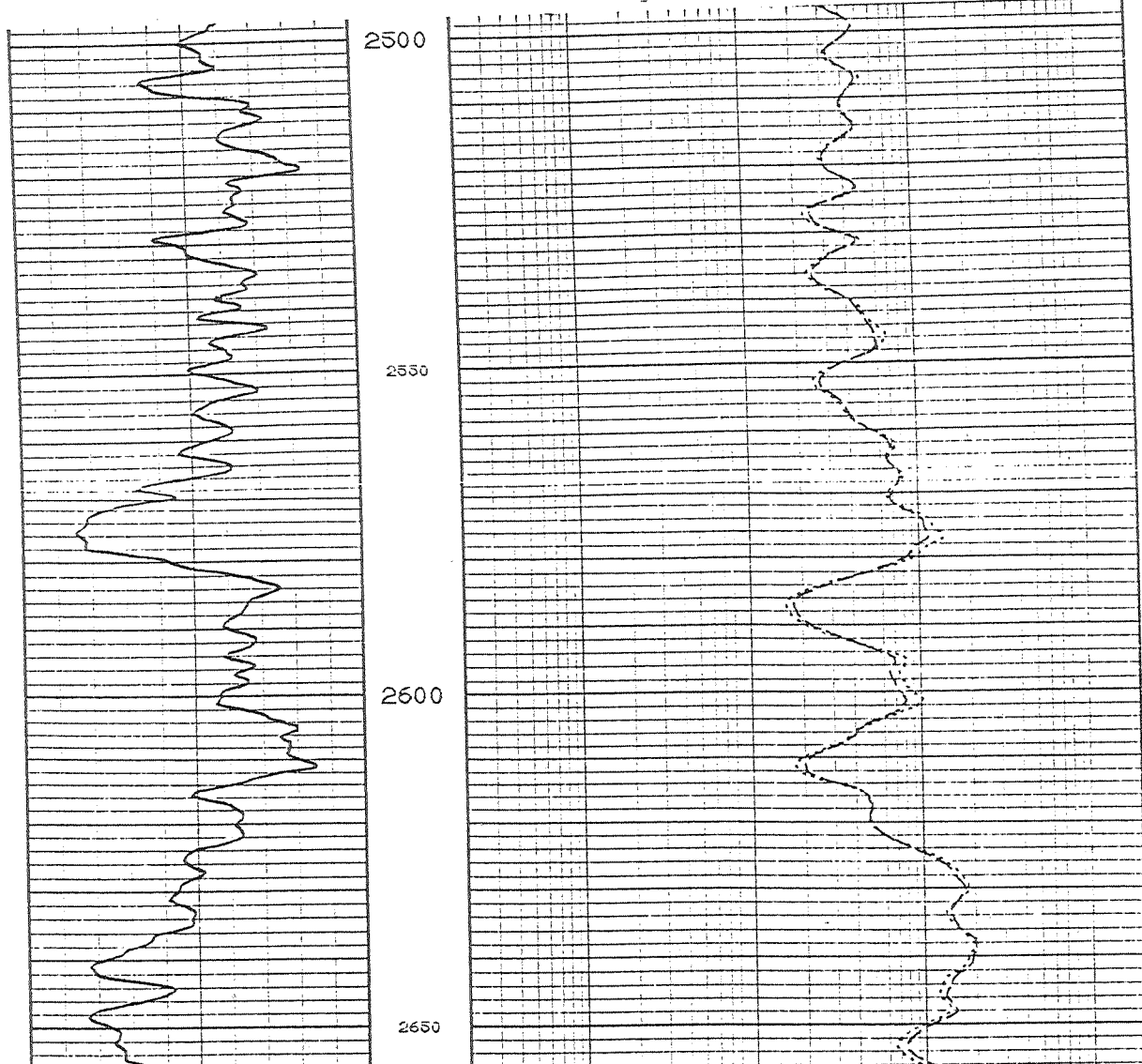
[Signature] Notary Public  
My commission expires November 6, 1995

Production

ALLEGHENY  
Nuclear  
SURVEYS INC.

# DIGITAL INDUCTION

COMPANY: SONAT EXPLORATION CO. WELL: Y & O COAL # 134 FIELD: SLAB FORK PROVINCE/COUNTY: WYOMING COUNTRY/STATE: USA/WV. TRIBUT NUMBER: 47-109-1184		OTHER SERVICES: USCD IEMP	
LOCATION: VALLIS BRANCH COUNTY: WYOMING FIELD: SLAB FORK COMPANY: SONAT EXPLORATION CO.		PERMANENT DATUM G.I., ELEVATION 2641 FT. LOG RE-ASSIGNED FROM K.B. 10.0 ABOVE PERMANENT DATUM DEPTH TO MEASURED LIP: K.B. 10.0	
LOG NO.: 25-JUN-91 DATE: ONE	DEPTH-DEPTER: 5715 FT. DEPTH-OCCLER: 5725 FT. FIRST READING: 5723 FT. LAST READING: 1500 FT. CASING-DEPTER: 1795 FT. CASING-OCCLER: 1795 FT. BIT SIZE: 7 1/8 IN. HOLE FLUID TYPE: DUSTED PRES./VISC.: PLUG/LUID LOSS: SAMPLE SOURCE: RT @ HIAS: 1180 RT @ HIAS: 1180 RT @ HIAS: 1180 SOURCE: DEE/189C BIT @ BIT: TIME SPEE @ 90 MAX SIZE: 1180 EQUIPMENT/LOG: RECORDED BY: WITH REED BY: REVISIONS BY:	ELEVATIONS: KB 2651 FT. DF 2651 FT. CL 2641 FT.	ELEVATION 2641 FT. ABOVE PERMANENT DATUM
# 261 WESTON UNIT NUMBER G. HUCK			

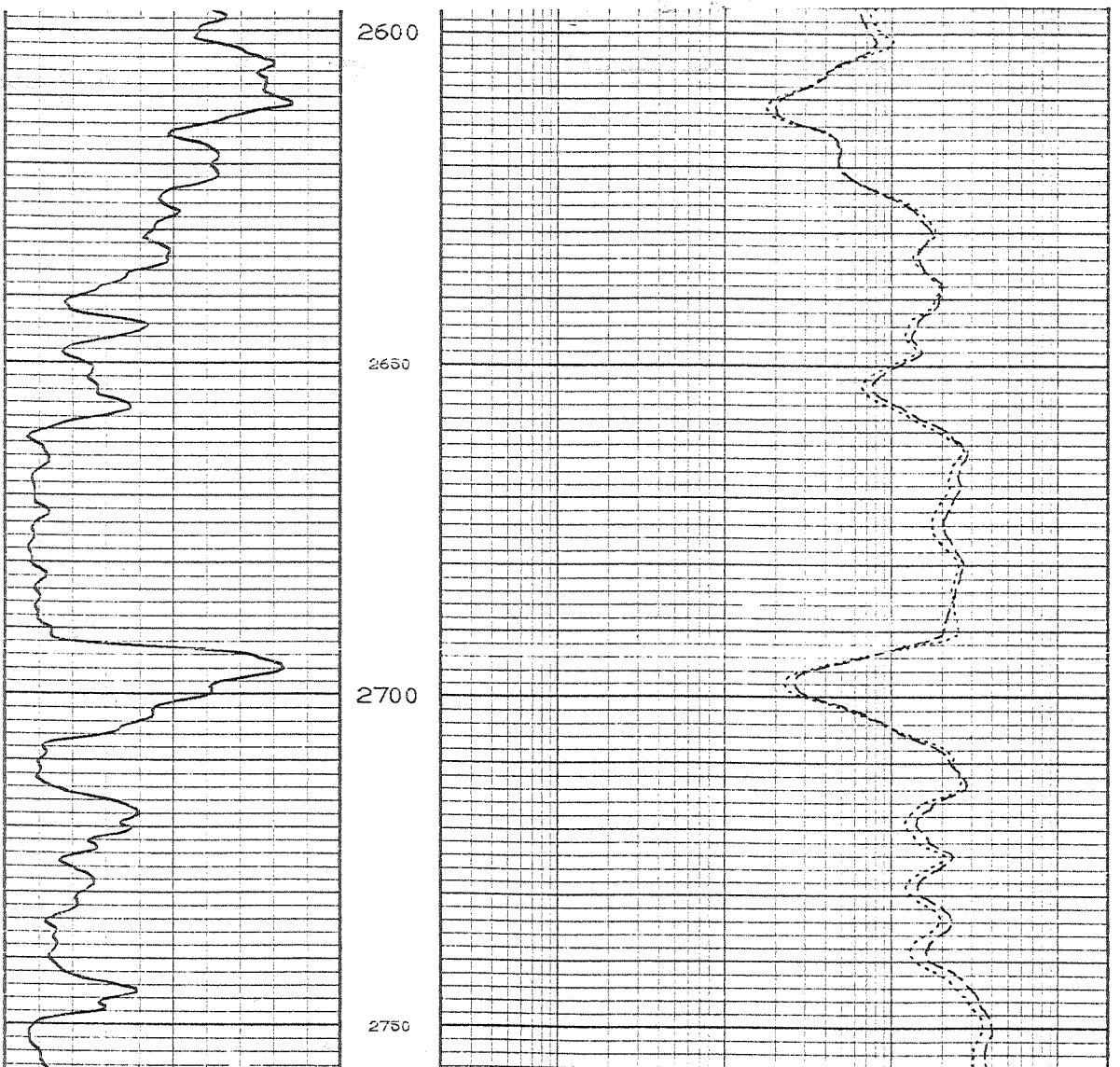


*Production*

ALLEGHENY  
NUCLEAR  
SURVEYS INC.

DIGITAL INDUCTION

LOCATION WALLIS BRANCH PRVNC/CO. WYOMING FIELD SLAB FORK WELL Y & O COAL # 134 COMPANY: SONAT EXPLORATION CO.		COMPANY SONAT EXPLORATION CO. WELL Y & O COAL # 134 FIELD SLAB FORK PROVINCE/COUNTRY WYOMING COUNTRY/STATE USA/WV. PERMIT NUMBER 47-109-1184		OTHER SERVICES USCD IHMMP		
PERMANENT DATUM G.L. LOG MEASURED FROM K.B. 10.0 DRILLING MEASURED FROM K.B. 10.0		ELEVATION 2641 FT. ARBE PERMANENT DATUM		ELEVATIONS: KB 2651 FT. DF 2651 FT. CL 2641 FT.		
DATE 23-JUN-91	RUN NUMBER ONE	LOCATION WALLIS BRANCH	ISD	SFC	TYP	PGF
DEPTH-DRILLER 3715 FT.	DEPTH-LOGGER 3725 FT.					
FIRST READING 3725 FT.	LAST READING 1000 FT.					
CASING-DRILLER 1705 FT.	BIT SIZE 7/8 IN.					
HOLE FLUID TYPE DREGS	DENS. /VISC.					
PH/LUID LOSS	SAMPLE SOURCE					
PH @ PRESS. TEMP	PH @ PRESS. TEMP					
PH @ PRESS. TEMP	SOURCE: RHT/RMC					
PH @ BIT	TIME SHUT OFF					
MAX PDC HHP	RECORDED BY # 261 WESTON					
RECORDED BY J.M. LINDLEY	BY G. HUCK					
RECORDED BY	RECORDED BY					
RECORDED BY	RECORDED BY					





*Production*

ALLEGHENY  
NUCLEAR  
SURVEYS INC.

DIGITAL INDUCTION

LOCATION WALLS BRANCH				COMPANY SONAT EXPLORATION CO.	
PRVNC/CO. WYOMING				WELL Y & O COAL # 134	
FIELD SLAB FORK				FIELD SLAB FORK	
WELL Y & O COAL # 134				PROVINCE/COUNTY WYOMING	
COMPANY SONAT EXPLORATION CO.				COUNTRY/STATE USA/WV.	
PERMIT NUMBER 47-109-1184				OTHER SERVICES	
LOCATION WALLS BRANCH				USCD	
1"SD	SFC	TWP	PR/E	TEMP	

PREPARMENT DATUM C.I.L.	ELEVATION 2641 FT.	ELEVATIONS:
LOG MEASURED FROM K.B. 10.0	ABOVE PREPARMENT DATUM	KB 2651 FT.
DRILLING MEASURED FROM K.B. 10.0		DF 2631 FT.
		CL 2641 FT.

DATE 23-JUN-91	ONE		
RUN NUMBER	ONE		
DEPTH-DRILLER	3715 FT.		
DEPTH-LOGGER	3725 FT.		
FIRST READING	1300 FT.		
LAST READING	1750 FT.		
CASING-DRILLER	1705 FT.		
CASING-LOGGER	1705 FT.		
BIT SIZE	7 1/8 IN.		
HOLE FLUID TYPE	DUSTED		
DRNG. VISC.			
PIVOT FLUID LOSS			
SAMPLE SOURCE			
IRG @ IRAS TEMP			
IRG @ IRAS TEMP			
IRG @ IRAS TEMP			
SOURCE: IRG/IRAC			
IRG @ IRG			
LINE SHEET C/P			
MAX P/C 11HP			
EQUILIBRIUM/BASIS			
RECORDED BY DAN TENNEY			
WELL HEAD RT			
WELL HEAD BT			

