

ENTERED

Department of Mines, Minerals and Energy
Division of Gas and Oil

Operations Name: W.B. STRAS VC2120
Permit #: 1758

DD-610

Department of Mines, Minerals and Energy
Division of Gas and Oil
P. O. Box 1416
Abingdon, Virginia 24210
703/676-5423

DRILLING REPORT

Pursuant to VR-480-05-22.1, § 1.36, the undersigned Permittee submits this report on Well VC2120 in the SAND LICK District of the DICKENSON City/County, Virginia on 12th day, NOVEMBER month, 1991.

LOCATION

City/County: DICKENSON District: SAND LICK
Surface Elevation: 2338.35 Elevation of Kelly Bushing: 2348.4 Quadrangle: NORA
11,850 FT. S. of Latitude 37° 07' 30" and 4620 FT. W. of Longitude 82° 17' 30"

or, State Plane Coordinates: _____ and _____.

Attach a final location plat as required by VR 480-05-22.1, § 1.36.

DRILLING DATA

Date Drilling Commenced: 10-15-91 Drilling Contractor: UNION DRILLING
Date Drilling Completed: 10-19-91 Rig Type: X Rotary _____ Cable Tool
Total Depth of Well: LTD = 2617 DTD = 2646



GEOLOGICAL DATA

Fresh Water at: _____ Feet _____ GPM _____ Feet _____ GPM
_____ Feet _____ GPM _____ Feet _____ GPM
_____ Feet _____ GPM _____ Feet _____ GPM
Salt Water at: _____ Feet _____ GPM _____ Feet _____ GPM
_____ Feet _____ GPM _____ Feet _____ GPM
_____ Feet _____ GPM _____ Feet _____ GPM

COAL SEAMS:

NAME	TOP	BOTTOM	THICKNESS	MINING IN AREA		
				YES	NO	MINED OUT
TILLER	1283	1286	3		X	
UPPER SEABOARD	1388	1390	2			
GREASY CREEK	1565	1568	3			
MIDDLE HORSEPEN	1806	1808	2			
WARCREEK	1920	1922	2			
LOWER HORSEPEN	2029	2032	3			

GAS AND OIL SHOWS:

FORMATION	TOP	BOTTOM	THICKNESS	IPF (MCFD/BOPD)	PRESSURE	HOURS TESTED
		2060		ODOR		
		2260		ODOR		
		2460		ODOR		
		2646		ODOR		

Cuttings or samples are ___ are not X available for examination by a member of the Virginia Division of Mineral Resources
 Cuttings or samples have ___ have not X been furnished to the Virginia Division of Mineral Resources

ELECTRIC LOGS AND SURVEYS

List logs run on wellbore: LDT/TEMP/GR/HIGH RES

Did log disclose vertical location of a coal seam? Yes X No ___

SURVEY RESULTS

<u>DEPTH OF SURVEY</u>	<u>DIRECTION/DISTANCE/DEGREES FROM TRUE VERTICAL</u>	<u>DEPTH OF SURVEY</u>	<u>DIRECTION/DISTANCE/DEGREES FROM TRUE VERTICAL</u>
200	1/2°	1600	3/4°
400	3/4°	1843	3/4°
638	3/4°	2060	1/2°
1030	3/4°	2260	1/2°
1240	1°	2460	3/4°
1430	1 1/2°	2646	1 1/2°

* Use additional sheets if necessary.

CASING AND TUBING

	<u>SIZE</u>	<u>TOP</u>	<u>BOTTOM</u>	<u>LENGTH</u>	<u>CEMENT USED (IN CU/FT)</u>	<u>DATE CEMENTED</u>	<u>PACKERS OR BRIDGE PLUG KIND</u>	<u>SIZE</u>	<u>SET</u>
<u>Conductor</u>	11 3/4"		35		-				
<u>Surface</u>	8 5/8"		355		110(130)	10-15-91			
<u>Water Protection</u>	4 1/2"		2251	2241	498(762)	10-19-91			
<u>Coal Protection</u>									
<u>Other Casing and Tubing Left in Well</u>									
<u>Liners</u>									

REMARKS: Shut down, fishing jobs, depths and dates, caving, lost circulation, etc.

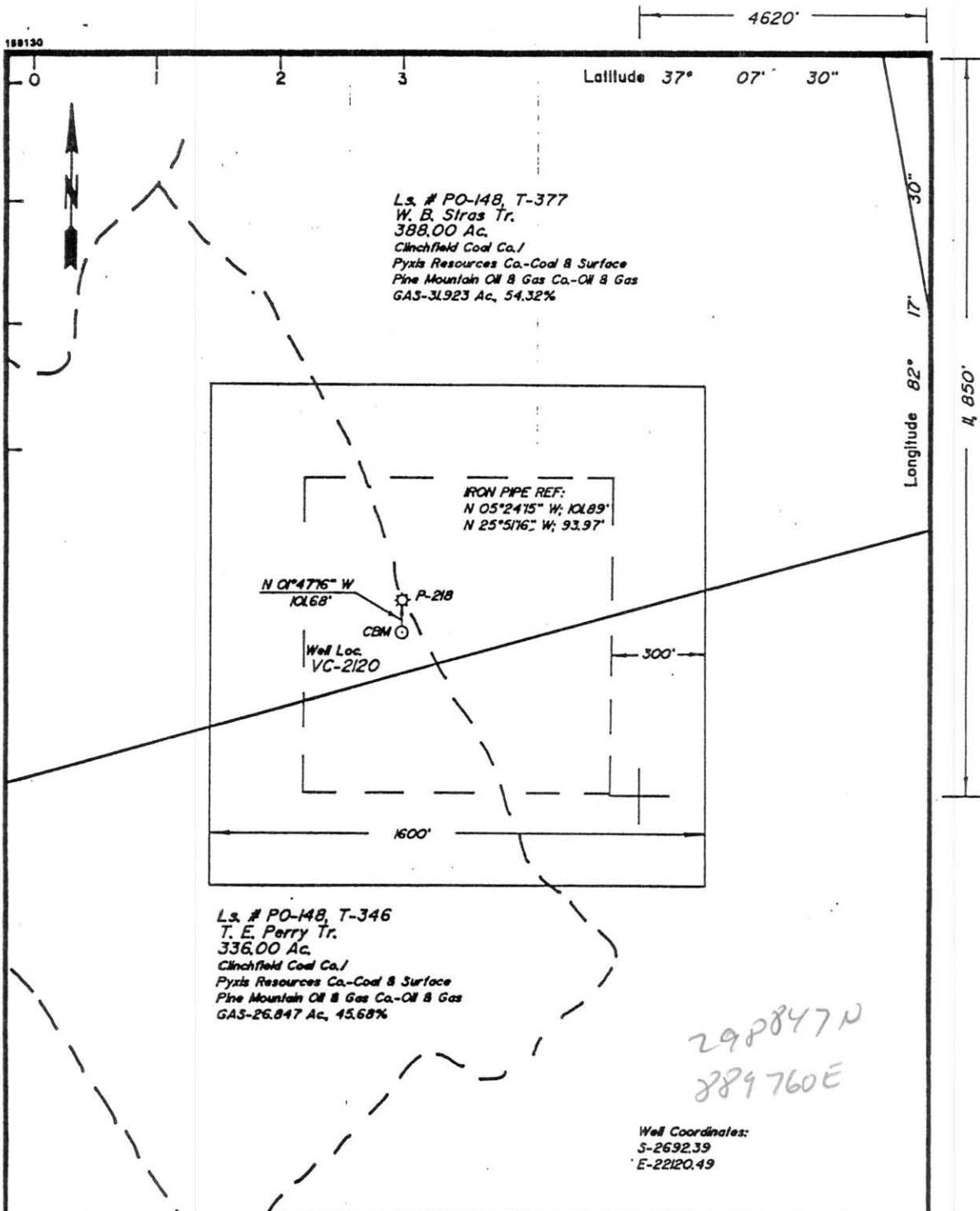
DRILLER'S LOG

Compiled by R. J. MACDONALD

GEOLOGIC AGE	FORMATION	GENERAL LITHOLOGY	COLOR	DEPTH		THICKNESS	REMARKS
				TOP	BOTTOM		
PENNSYLVANIAN	SAND, SHALE & THIN COALS			0	1283	1283	
	TILLER COAL			1283	1286	3	
	SAND, SHALE & THIN COALS			1286	1388	102	
	UPPER SEABOARD COAL			1388	1390	2	
	SAND, SHALE & THIN COALS			1390	1565	175	
	GREASY CREEK COAL			1565	1568	3	
	SAND, SHALE & THIN COALS			1568	1806	238	
	MIDDLE HORSEPEN COAL			1806	1808	2	
	SAND, SHALE & THIN COALS			1808	1920	112	
	WARCREEK COAL			1920	1922	2	
	SAND, SHALE & THIN COALS			1922	2029	107	
	LOWER HORSEPEN COAL			2029	2032	3	
	SAND, SHALE & THIN COALS			2032	2636	604	
MISSISSIPPIAN	RED ROCK & SHALE			2636	2646	10	
	DRILLER'S TOTAL DEPTH				2646		
	LOGGER'S TOTAL DEPTH				2617		

Permittee: EQUITABLE RESOURCES EXPLORATION (Company)

By: Joseph A. Clung (Signature)



COMPANY Equitable Resources Exploration

ADDRESS 1989 E. Stone Dr., Kingsport, TN 37660

WELL NAME VC-2120

FARM W. B. Stras TRACT T-377

LEASE NO. PO-148 ELEVATION 2338.35

ACRES 388.00 QUADRANGLE Nora

COUNTY Dickenson DISTRICT Sand Lick

REG. ENGINEER X REG. NO. 6992

CERT. LAND SURVEYOR _____ CERT. NO. _____

FILE NO. _____ DRAWING NO. 2962

DATE July 3, 1991 SCALE 1" = 400'

This plat is X new _____ updated

TN's plat X is _____ is not based on a mine coordinate system established for the area of the well location.

FORM 5

WELL LOCATION MAP

WELL NO. VC-2120

Denotes location of well on United States Topographic Maps, scale 1 to 24,000, latitude and longitude lines being represented by border lines as shown.

CERTIFICATE NO. 6992

CERTIFICATION OF WELL PLAT

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 of the Va. Well Review Board.

A. A. Baldridge

Registered Engineer or Certified Land Surveyor in Charge

Department of Mines, Minerals and Energy
Division of Gas and Oil
P. O. Box 1416
Abingdon, Virginia 24210
703/676-5423

DL-610
ENTERED

CONFIDENTIAL
until 1-29-92

COMPLETION REPORT

WELL TYPE: Oil Gas Coalbed Methane or Injection well

Date Well Completed: 10-29-91 Total Depth of Well: LTD=2617 DTD=2646

Attach the Drilling Report, if not previously submitted. In addition, submit any changes in casing or tubing that were approved after the Drilling Report was submitted.

STIMULATION RECORD

WARCREEK, UNNAMED "C", BECKLEY, L. HORSEPEN
Zone 1: GREASY CREEK, M. HORSEPEN, C-SEAM Formation Stimulated With: 70 Q FOAM
W/9800 # 12/20 SAND - 700,000 SCF N2 - 627 BF
Perforated: 1566 TO 2031 No. of Perforations: 13 Perforation Size: .34"
Formation Broke Down at: 1410 PSIG Average Injection Rate: 14.3 BPM (48 DH)
ISIP 2424 PSIG 5 MIN SIP 1638 PSIG Average Injection Pressure 3511 P
Date Stimulated 10-29-91

Zone 2: _____ Formation Stimulated With: _____
Perforated: _____ TO _____ No. of Perforations: _____ Perforation Size: _____
Formation Broke Down at: _____ PSIG Average Injection Rate: _____
ISIP _____ PSIG _____ MIN SIP _____ PSIG Average Injection Pressure _____ P
Date Stimulated _____

Zone 3: _____ Formation Stimulated With: _____
Perforated: _____ TO _____ No. of Perforations: _____ Perforation Size: _____
Formation Broke Down at: _____ PSIG Average Injection Rate: _____
ISIP _____ PSIG _____ MIN SIP _____ PSIG Average Injection Pressure _____ P
Date Stimulated _____

FINAL PRODUCTION: _____ Natural After Stimulation
BOD MCFD HOURS TESTED ROCK PRESSURE HOURS TESTED

Zone (1) _____
Zone (2) _____
Zone (3) _____

Final Production if Gas Zones are Commingled *35 MCFD 6 Hours Tested 305 PSIG 48 Hours Tes

* O.F. NOT ABSOLUTE

* Use additional sheets with this format, if more than three (3) zones were stimulated.

Permittee: EQUITABLE RESOURCES EXPLORATION (Company)

By: Joseph A. [Signature] (Signature)

Department of Mines, Minerals and Energy
 Division of Gas and Oil
 P. O. Box 1416
 Abingdon, Virginia 24210
 703/676-5423

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NOVEMBER month, 1991.

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	_____ Feet	_____ GPM	_____ Feet	_____ GPM
Salt Water at:	_____ Feet	_____ GPM	_____ Feet	_____ GPM
	_____ Feet	_____ GPM	_____ Feet	_____ GPM
	_____ Feet	_____ GPM	_____ Feet	_____ GPM

COAL SEAMS:

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<u>Other Casing and Tubing Left in Well</u>	2 3/8"		2146							
<u>Liners</u>										

REMARKS: Shut down, fishing jobs, depths and dates, caving, lost circulation, etc.

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Permittee: EQUITABLE RESOURCES EXPLORATION (Company)

By: Joseph A. Young (Signature)

DRILLER'S LOG

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	DRILLER'S TOTAL DEPTH				2646		
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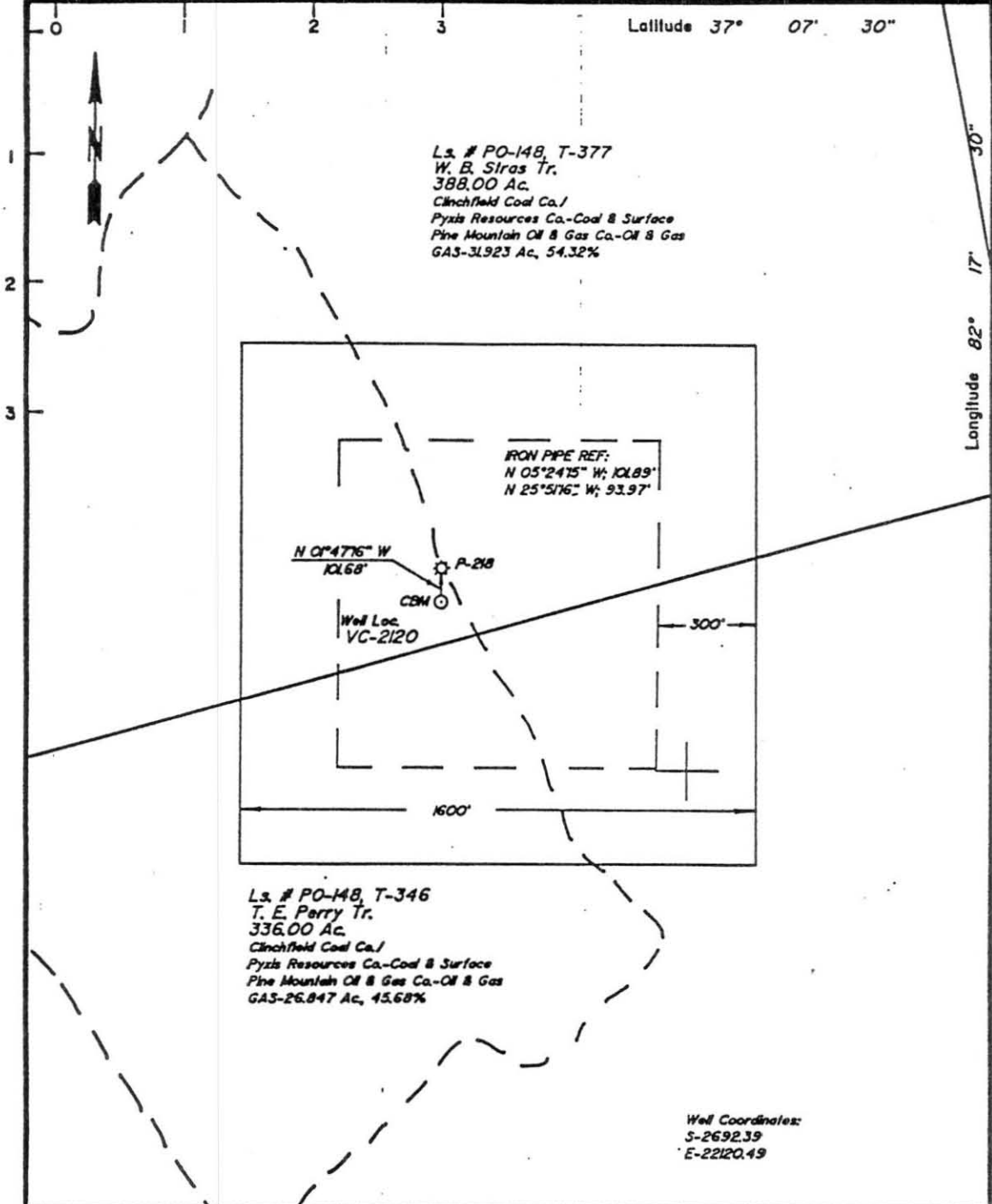
Permittee: EQUITABLE RESOURCES EXPLORATION (Company)

By: Joseph A. Chung (Signature)

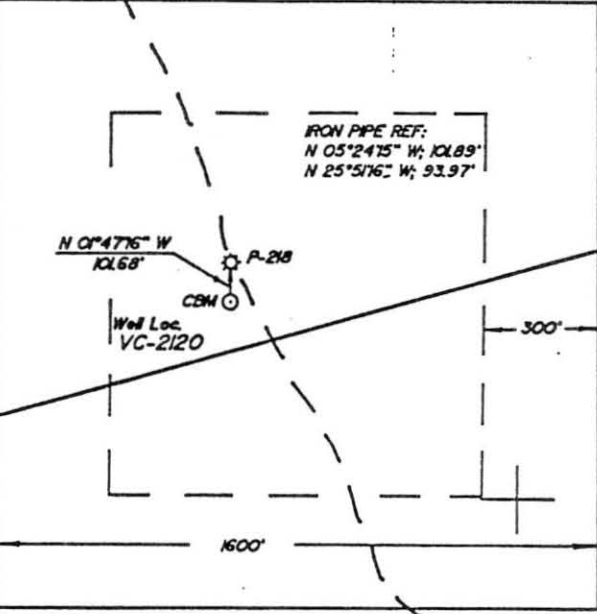
188130

4620'

Latitude 37° 07' 30"



Ls. # PO-148, T-377
 W. B. Strass Tr.
 388.00 Ac.
 Clinchfield Coal Co./
 Pyxis Resources Co.-Coal & Surface
 Pine Mountain Oil & Gas Co.-Oil & Gas
 GAS-31,923 Ac, 54.32%



Ls. # PO-148, T-346
 T. E. Perry Tr.
 336.00 Ac.
 Clinchfield Coal Co./
 Pyxis Resources Co.-Coal & Surface
 Pine Mountain Oil & Gas Co.-Oil & Gas
 GAS-26,847 Ac, 45.68%

Well Coordinates:
 S-2692.39
 E-22120.49

COMPANY Equitable Resources Exploration

ADDRESS 1989 E. Stone Dr., Kingsport, TN 37660

WELL NAME VC-2120

FARM W. B. Strass TRACT T-377

LEASE NO. PO-148 ELEVATION 2338.35

ACRES 388.00 QUADRANGLE Nora

COUNTY Dickenson DISTRICT Sand Lick

REG. ENGINEER X REG. NO. 6992

CERT. LAND SURVEYOR _____ CERT. NO. _____

FILE NO. _____ DRAWING NO. 2962

DATE July 3, 1991 SCALE 1" = 400'

This plat is new updated

This plat is in _____ is not based on a mine coordinate system established for the area of the well location.

FORM 5

WELL LOCATION MAP
 WELL NO. VC-2120

Denotes location of well on United States Topographic Maps, scale 1 to 24,000, latitude and longitude lines being represented by border lines as shown.

CERTIFICATE NO. 6992
 CERTIFICATION OF WELL PLAT

I, the undersigned, a Professional Engineer, 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 of the Va. Well Review Board.

H. A. Baldridge
 Registered Engineer or Certified Land Surveyor in Charge

	1208.00	SLST		NORTON	
	1210.00	SH		NORTON	
	1213.00	COAL		NORTON	
	1220.00	SLST		NORTON	
	1228.00	SS		NORTON	
	1232.00	SLST		NORTON	
	1246.00	SS		NORTON	
	1248.00	SH		NORTON	
	1284.00	SLST		NORTON	
	1286.00	COAL		NORTON	TILLER
	1301.00	SLST		NORTON	
	1302.00	SH		NORTON	
	1378.00	SLST		NORTON	
	1380.00	COAL		NORTON	
	1387.00	SH		NORTON	
	1390.00	COAL		NORTON	UPPER SEABOARD
	1418.00	SLST		NORTON	
	1420.00	COAL		NORTON	
	1450.00	SLST		NORTON	
	1480.00	SS		NORTON	
	1530.00	SS	QTZ	LEE	
	1536.00	SLST		LEE	
	1538.00	COAL		LEE	
	1566.00	SLST		LEE	
	1568.00	COAL		LEE	GREASY CREEK
	1572.00	SH		LEE	
	1574.00	SLST		LEE	
	1576.00	SH		LEE	
	1586.00	SLST		LEE	
	1600.00	SS		LEE	
	1602.00	COAL		LEE	
	1637.00	SLST		LEE	
	1638.00	COAL		LEE	
	1704.00	SLST		LEE	
	1705.00	COAL		LEE	
	1712.00	SLST		LEE	
	1724.00	SH		LEE	
	1736.00	SS		LEE	
	1744.00	SLST		LEE	
	1766.00	SS		LEE	
	1768.00	COAL		LEE	
	1806.00	SLST		LEE	
	1808.00	COAL		LEE	MIDDLE HORSEPEN
	1881.00	SLST		LEE	
	1883.00	COAL		LEE	
	1920.00	SS		LEE	

	1922.00	COAL		LEE	WARCREEK
	1948.00	SLST		LEE	
	1950.00	COAL		LEE	
	1954.00	SLST		LEE	
	1958.00	SH		LEE	
	1960.00	SLST		LEE	
	1962.00	COAL		LEE	BECKLEY
	2029.00	SLST		LEE	
	2032.00	COAL		LEE	LOWER HORSEPEN
	2036.00	SLST		LEE	
	2074.00	SS		LEE	
	2102.00	SLST		LEE	
	2103.00	COAL		LEE	LITTLE FIRE CREEK
	2130.00	SLST		LEE	
	2132.00	COAL		LEE	POCAHONTAS #9
	2134.00	SH		LEE	
	2140.00	SLST		LEE	
	2142.00	SH		LEE	
	2167.00	SLST		LEE	
	2204.00	SS		LEE	
	2212.00	SLST		LEE	
	2240.00	SS		LEE	
	2398.00	SS	QTZ	POCAHONTAS	
	2414.00	SS		POCAHONTAS	
	2416.00	SLST		POCAHONTAS	
	2418.00	SH		POCAHONTAS	
	2420.00	COAL		POCAHONTAS	POCAHONTAS #6
	2425.00	SLST		POCAHONTAS	
	2426.00	COAL		POCAHONTAS	
	2428.00	SH		POCAHONTAS	
	2458.00	SLST		POCAHONTAS	
	2480.00	SS		POCAHONTAS	
	2484.00	SLST		POCAHONTAS	
	2570.00	SS		POCAHONTAS	
	2572.00	COAL		POCAHONTAS	POCAHONTAS #3
	2636.00	SS		POCAHONTAS	
	2646.00	SS		BLUESTONE	

DI-610

PNTID	BOTTOM	PRIM LITH	SEC LITH	PRIM ZONE	SEC ZONE
DI-610	102.00	SS		NORTON	
	176.00	SLST		NORTON	
	211.00	SS		NORTON	
	231.00	SLST		NORTON	
	295.00	SS		NORTON	
	391.00	SLST		NORTON	
	392.00	COAL		NORTON	
	404.00	SLST		NORTON	
	405.00	COAL		NORTON	
	406.00	SH		NORTON	
	420.00	SLST		NORTON	
	422.00	COAL		NORTON	
	424.00	SLST		NORTON	
	426.00	SH		NORTON	
	482.00	SLST		NORTON	
	484.00	COAL		NORTON	
	548.00	SLST		NORTON	
	549.00	COAL		NORTON	
	574.00	SLST		NORTON	
	579.00	COAL		NORTON	
	606.00	SLST		NORTON	
	632.00	SS		NORTON	
	633.00	SH		NORTON	
	792.00	SLST		NORTON	
	796.00	COAL		NORTON	
	797.00	SH		NORTON	
	942.00	SLST		NORTON	
	946.00	COAL		NORTON	
	1012.00	SLST		NORTON	
	1013.00	COAL		NORTON	
	1017.00	SLST		NORTON	
	1018.00	SH		NORTON	
	1035.00	SLST		NORTON	
	1038.00	COAL		NORTON	
	1040.00	SLST		NORTON	
	1102.00	SS		NORTON	
	1164.00	SLST		NORTON	
	1165.00	COAL		NORTON	
	1172.00	SLST		NORTON	
	1174.00	COAL		NORTON	
	1193.00	SLST		NORTON	
	1198.00	COAL		NORTON	
	1200.00	SH		NORTON	
	1204.00	SLST		NORTON	
	1206.00	SH		NORTON	