

OIL AND GAS WELL  
SUMMARY REPORT

API No. 45-051-20868

VDMR Well

Rep. No.

DMQ File No. DT-268

Operator Philadelphia Oil Company

Farm Harper Coal and Coke

Co. Well No. P-206

County Dickinson

Quadrangle

Climtwood - 7 1/2'

Location (UTM) N 4, 113, 790 ; E 376, 950

UTM Zone 17

(Lat. and Long.)

Field Nora

Province

Appalachian Plateaus

Elev. (specify) 1767' GR TD 6225

Form. at TD

Clinton Shale

INITIAL FLOW: 246,000 CU.FT.

Age

Silurian

Date compl. or abandoned May 10, 1986

Result Gas well

Gas Shows

Gas Pays

Main Production

Prod. Form.

Devonian; Berea

FINAL FLOW: 1,186,000 CU.FT.

Age

Devonian; Mississippian

Treatment:

Maxon - 65 quality foam using 15,500 pounds of sand, 397,000 SCF of N<sub>2</sub> and 1000 gallons of 28% acid. Berea - 75 quality foam using 60,000 pounds of sand, 616,000 SCF of N<sub>2</sub> and 500 gallons of 15% acid. Brown shale - 75 quality foam free using 75,000 pounds of sand, 1,145,400 SCF of N<sub>2</sub> and 750 gallons of 28% acid.

Oil shows

Water

FW

Yes

at

47'

at

1396'

at

SH

at

at

at

Coal

183-187; 452-455; 875-881; 988-991

Plat

Plotted

Completion Report

X

Drillers Log

X

Geologic Log

Samples

Interval Sheet

Sample Interval

Remarks

Geophysical Logs

S.P.

Res

Gamma

Neutron

Density

Sonic

Other

Stratigraphic Data Source

Formation.	Top.	Datum (Subsea)	Thickness
Sand and shale	0	+1767	2426
Rawencliff	2426	-659	106
White Stone Gap	2532	-765	118
Shale	2650	-883	114
Maxon	2764	-997	340
Shale	3104	-1337	176
Little Linn	3280	-1513	92
Linn and Shale	3372	-1605	54
Big Linn	3426	-1659	394
Keener	3820	-2053	14
Weir	3834	-2067	452
Remarks Coffee Shale	4286	-2519	76
Berea	4362	-2595	74
Brown shale	4436	-2669	839
White Slate	5275	-3508	225
Brown shale	5500	-3733	103
Coniferous	5603	-3836	437
Keener	6040	-4273	10
References Clinton Shale	6050	-4283	175

Released to Open File: Completion

October 5, 1988

Sampler

None

(Note: UTM measurements in meters, all others in feet)

D-268

API WELL NO. 45 - 051 - 20868  
State County Permit

Date: June 4, 1986  
Operator's Well  
Name Tarpon Coal & Coke Co. No. P-206

PHILA. OIL CO,  
TARPON COAL & COKE  
P-206  
CLINTWOOD - 7 1/2  
EL. - 1767

VIRGINIA OIL AND GAS INSPECTOR  
205 W. MAIN STREET  
ABINGDON, VA 24210  
703-628-8115



REPORT OF COMPLETION OF WELL WORK

Pursuant to Regulation 4.06 of the Regulations under the Virginia Oil and Gas Act, the undersigned well operator reports completion of the type(s) of well work specified below on the referenced well in Clintwood district, Dickenson County, Virginia on 10 day, 5 month, 1986.

WELL TYPE: Oil \_\_\_/ Gas X/ Enhanced recovery \_\_\_/ Waste Disposal \_\_\_/ If "Gas", Production X/ Underground Storage \_\_\_/ Exempt by Code Section 45.1-300.B.1. from general oil and gas conservation law: yes \_\_\_/ no \_\_\_/

WELL WORK: Drill X/ Deepen \_\_\_/ Redrill \_\_\_/ Stimulate \_\_\_/ Plug off old formation \_\_\_/ Perforate new formation \_\_\_/ Plug \_\_\_/ Replug \_\_\_/ Other physical change in well (specify \_\_\_\_\_)

The well work was done as shown in the Appendix(es) applicable to the type(s) of well work involved.

CONFIDENTIALITY STATUS UNDER CODE OF VIRGINIA SECTION 45.1-332.

\_\_\_ Ninety days from the filing of this report  
OR  
X Two years from October 5, 1986, the date on which the referenced well was COMPLETED, the well being an exploratory well as defined in Code of Virginia Section 45.1-288.21.

APPLICANT: Philadelphia Oil Company  
BY Brint Camp  
ITS District Geologist  
ADDRESS 1101 N. Eastman Rd., Kingsport, TN 37664  
TELEPHONE 615-246-4332

Form 16  
Appendix A, Sheet 1 (Reverse)  
Continued from Obverse side

#### OTHER GENERAL INFORMATION

An electric log survey was \_\_\_/ was not \_\_\_/ conducted pursuant to Code of Virginia Section 45.1-333.B.2, at the coal owner's or operator's request.

An electric log survey was X/ was not \_\_\_/ run for other purposes. This survey did \_\_\_/ did not X/ disclose the vertical location of a coal seam.

Note: If a coal seam was located, the part of the survey from the surface through the coal is attached in accordance with Code of Virginia Section 45.1-333.B.3.

Deviation surveys were X/ were not \_\_\_/ required under Code of Virginia Section 45.1-333.C "to the bottom of the lowest published coal seam depth."

Note: If deviation surveys were required, the survey results are attached.

A continuous survey was \_\_\_/ was not X/ required under Code of Virginia Section 45.1-333.C.

Note: If a continuous directional survey was required, the survey results are attached.

#### CHANGES IN THE PERMITTED WELL WORK

The well operator did \_\_\_/ did not X/ make any change(s) in the permitted well work, verbally approved by the Inspector or Assistant Inspector under Regulation 4.03 of the Regulations under the Virginia Oil and Gas Act, for the purpose of insuring successful completion of the well work.

Note: The nature and purpose of each such change, if any, is set out below or on additional sheets if such are required.

FORM 16  
APPENDIX A,  
SHEET 1, (OBVERSE)

API WELL NO. 45 - 051 - 20868  
State County Permit

Date: June 4, 1986

Operator's Well

Name Tarpon Coal & Coke Co. No. P-206

REPORT OF COMPLETION OF WELL WORK  
IF DRILLING, REDRILLING, OR DEEPENING IS INVOLVED

DRILLING CONTRACTOR Union Drilling  
ADDRESS P. O. Drawer 40, Buckhamon, WV 24201  
TELEPHONE 304-472-4610

GEOLOGICAL TARGET FORMATION Corniferous  
DEPTH OF COMPLETED WELL 6225 FEET  
DATE DRILLING COMMENCED 3/23/86  
DATE DRILLING COMPLETED 4/5/86  
DRILLING RIG: ROTARY X / CABLE TOOL        /

GEOLOGICAL DATA      Depth      Thickness  
                            Top      Bottom

Fresh Water      47', 1396'

Salt water

	Name	MINING IN AREA	
		Yes	No
Coal Seams	183-87 452-55 875-81	988-91	<del>MINED</del>

Oil      Formation

Gas      Formation  
            Maxon  
            Big Lime  
            Berea

below:      The data on depth of strata is based on the source(s) checked

- Applicant's own drilling experience in the area
- Information supplied by the coal operator in the area
- Information already in possession of the Inspector
- Other (as follows) \_\_\_\_\_

DRILLER'S LOG

Compiled by \_\_\_\_\_

Geolo- gical Age	Formation	General Lithology	Color	Depth (feet)		Thickness	Remarks
				Top	Bottom		
Mississippian	Sand & Shale			0	2426	2426	
"	Ravencliff			2426	2532	106	
"	Little Stone Gap			2532	2650	118	
"	Shale			2650	2764	114	
"	Maxon Sands			2764	3104	340	
"	Shale			3104	3280	176	
"	Little Lime			3280	3372	92	
"	Lime & Shale			3372	3426	54	
"	Big Lime			3426	3820	394	
"	Keener			3820	3834	14	
"	Weir			3834	4286	452	
"	Coffee Shale			4286	4362	76	
"	Berea			4362	4436	74	
Devonian	Brown Shale			4436	5275	839	
"	White Slate			5275	5500	225	
"	Brown Shale			5500	5603	103	
Devonian/Silurian	Corniferous			5603	6040	437	
Devonian	Keefer Sand			6040	6050	10	
"	Clinton Shale			6050	6225		
	Logger's Total Depth				6225		

Complete on supplemental sheet as necessary

CASING AND TUBING PROGRAM

PRELIMINARY INFORMATION

Is the subject well underlaid by the red shales? Yes X / No \_\_\_ /  
If Yes, was a coal protection string set to the red shales? Yes X / No \_\_\_ /

	SIZE	TOP	BOTTOM	LENGTH	PERFORATIONS	
					FROM	TO
<u>CONDUCTOR:</u>	16"	0	22'	22'		
	11 3/4"	0	330'	330'		
<u>CASING CIRCULATED AND CEMENTED IN TO SURFACE:</u>	8 5/8"	0	2140'	2140'		
<u>COAL PROTECTION CASING SET UNDER SPECIAL RULE OF CODE OF VIRGINIA 45.1-334.B:</u>						
<u>OTHER CASING AND TUBING LEFT IN WELL;</u>	4 1/2"	0	6164'	6164'	2918-3100	
					4372-4434	
					4460-5600	
<u>LINERS LEFT IN WELL UNDER CODE OF VIRGINIA SECTION 45.1-336 OR OTHERWISE:</u>	2 3/8"	0	5446			

<u>PACKERS OR BRIDGE PLUGS:</u>	<u>KIND</u>	<u>SIZE</u>	<u>SET AT</u>
	Butler-Larkin	4 1/2 X 2 3/8	3129

REMARKS: SHUT DOWN DEPTHS, DATES; FISHING JOB DEPTHS, DATES; CAVING; ETC.)

SAMPLES AND CUTTINGS

WILL X WILL NOT \_\_\_ BE AVAILABLE FOR EXAMINATION BY A MEMBER OF THE VIRGINIA DIVISION OF MINERAL RESOURCES  
 WILL X WILL NOT \_\_\_ BE FURNISHED THE VIRGINIA DIVISION OF MINERAL RESOURCES UPON REQUEST  
 WILL \_\_\_ WILL NOT X REQUIRE SACKS TO BE FURNISHED BY THE VIRGINIA DIVISION OF MINERAL RESOURCES.







DIRECTIONAL SURVEY

P-206

<u>Depth</u>	<u>Degree</u>
200	1
386	1
573	1
761	1
979	3/4
1230	1
1443	1 1/2
1691	1
1908	1
2122	1

Latitude 37° 10' 00"  
Longitude 82° 22' 30"

Date: December 16, 19 85

Operator's Well No. P-206

VIRGINIA OIL AND GAS INSPECTOR  
DEPARTMENT OF LABOR AND INDUSTRY  
DIVISION OF MINES  
OIL AND GAS SECTION  
205 W. MAIN STREET  
ABINGDON, VIRGINIA 24210  
PHONE 703 628-8115



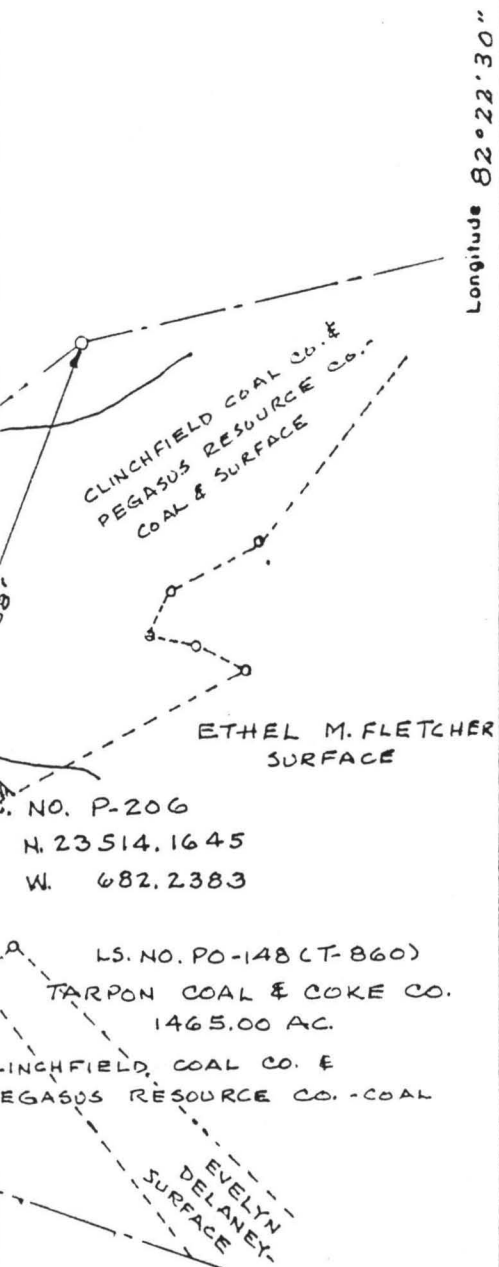
WELL PLAT

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

This plat is new X / updated     /

This plat is X / is not     / based on a mine coordinate system established for the areas of the well location.

Well operator Philadelphia Oil Company  
1101 N. Eastman Road  
Address Kingsport, TN. 37664  
Farm Tarpon Coal & Coke Company  
Tract T-860 Acres 1465.00 Lease No. PO-148  
Elevation 1767.34'  
Quadrangle Clintwood, VA.  
County Dickenson District Clintwood  
Registered Engineer            Registration No.             
Certified Land Surveyor             Cert. No. 871  
File No.            Drawing No.             
Date 12-16-1985 Scale 1"=400'



NO. P-206  
N. 23514.1645  
W. 682.2383  
LS. NO. PO-148 (T-860)  
TARPON COAL & COKE CO.  
1465.00 AC.  
CLINCHFIELD COAL CO. & PEGASUS RESOURCE CO. - COAL  
EVELYN DELANEY SURFACE

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 Virginia Well Review Board.

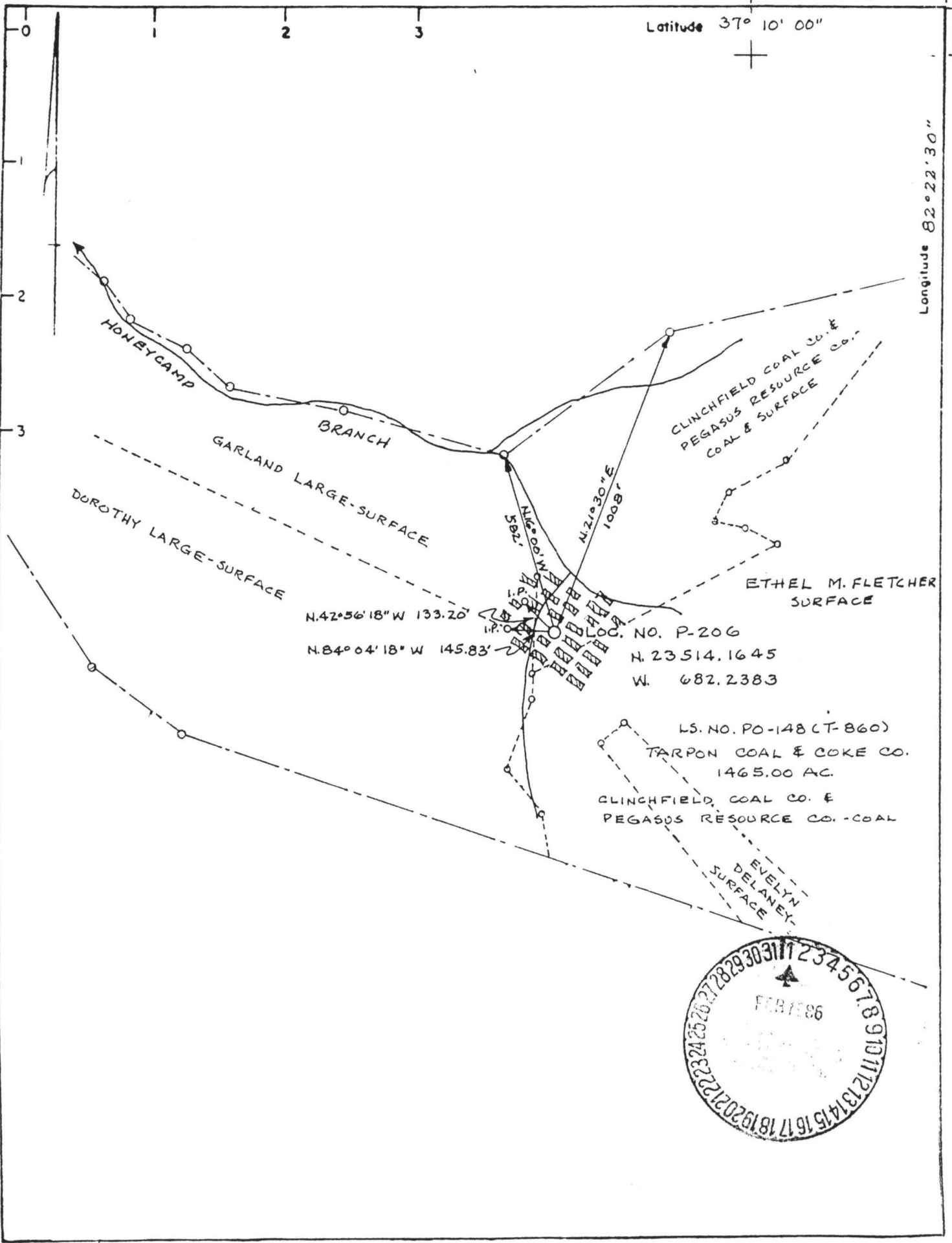
Luther Adkins, Jr. #871  
Registered Engineer or Certified Land Surveyor  
in Charge

3100'

Latitude 37° 10' 00"

780'

Longitude 82° 22' 30"



VIRGINIA DIVISION OF MINERAL RESOURCES  
 Box 3667, Charlottesville, VA 22903

INTERVAL SHEET

Page 1 of 3

Well Repository No.: W-6810

Date rec'd: 6/16/86 Date Processed: 6/16/86

Sample Interval: from 2230 to: 6800

Property: Tarson Coal and Coke P-206

Number of samples: 428

Company: Philadelphia Oil Company

Total Depth: 6800

County: Dickenson

Oil or Gas: XX Water: Exploratory:

From-To	From-To	From-To	From-To	From-To
2230 - 2240	2530 - 2540	2950 - 2960	3260 - 3270	3640 - 3650
2240 - 2250	2530 - 2540	2960 - 2970	3270 - 3280	3650 - 3660
2250 - 2260	2540 - 2550	2970 - 2980	3280 - 3290	3660 - 3670
2260 - 2270	XXXX - XXXX	2980 - 2990	3290 - 3300	3670 - 3680
2270 - 2280	2710 - 2720	2990 - 3000	3300 - 3310	3680 - 3690
2280 - 2290	2710 - 2720	3000 - 3010	3310 - 3320	3690 - 3700
2290 - 2300	2720 - 2730	3010 - 3020	3320 - 3330	3700 - 3710
2300 - 2310	2730 - 2740	3020 - 3030	3330 - 3340	3710 - 3720
2310 - 2320	2740 - 2750	3030 - 3040	3340 - 3350	3720 - 3730
XXXX - XXXX	2750 - 2760	3040 - 3050	3350 - 3360	3730 - 3740
2340 - 2350	2760 - 2770	3050 - 3060	3360 - 3370	3740 - 3750
2350 - 2360	2770 - 2780	3060 - 3070	3370 - 3380	3750 - 3760
2360 - 2370	2780 - 2790	3070 - 3080	3380 - 3390	3760 - 3770
2370 - 2380	2780 - 2790	3080 - 3090	3390 - 3400	3770 - 3780
2380 - 2390	2790 - 2800	3090 - 3100	3400 - 3410	3780 - 3790
2390 - 2400	2800 - 2810	3100 - 3110	3410 - 3420	3790 - 3800
2400 - 2410	2810 - 2820	XXXX - XXXX	3420 - 3430	3800 - 3810
2410 - 2420	2820 - 2830	3120 - 3130	3430 - 3440	3810 - 3820
2420 - 2430	2830 - 2840	3130 - 3140	3440 - 3450	3820 - 3830
2430 - 2440	2840 - 2850	3140 - 3150	3440 - 3450	3830 - 3840
2440 - 2450	2850 - 2860	3150 - 3160	3450 - 3460	3840 - 3850
2450 - 2460	2860 - 2870	3160 - 3170	3460 - 3470	3850 - 3860
2460 - 2470	2870 - 2880	3170 - 3180	3470 - 3480	3860 - 3870
2470 - 2480	2880 - 2890	3180 - 3190	3480 - 3490	3870 - 3880
2480 - 2490	2890 - 2900	3190 - 3200	3490 - 3500	3880 - 3890
2490 - 2500	2900 - 2910	XXXX - XXXX	XXXX - XXXX	3890 - 3900
2500 - 2510	2910 - 2920	3210 - 3220	3600 - 3610	3900 - 3910
2510 - 2520	2920 - 2930	3220 - 3230	XXXX - XXXX	3910 - 3920
2520 - 2530	2930 - 2940	3230 - 3240	3620 - 3630	3920 - 3930
2520 - 2530	2940 - 2950	XXXX - XXXX	3630 - 3640	3930 - 3940

VIRGINIA DIVISION OF MINERAL RESOURCES  
Box 3667, Charlottesville, VA 22903

INTERVAL SHEET  
Continued

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Well Repository No.: W-6810

From-To	From-To	From-To	From-To	From-To
3940 - 3950	4330 - 4340	4720 - 4730	5120 - 5130	5520 - 5530
3950 - 3960	4330 - 4340	4730 - 4740	5130 - 5140	5530 - 5540
3960 - 3970	4340 - 4350	4740 - 4750	5140 - 5150	5540 - 5550
3970 - 3980	4350 - 4360	4750 - 4760	5150 - 5160	5550 - 5560
3980 - 3990	4360 - 4370	4760 - 4770	5160 - 5170	5560 - 5570
3990 - 4000	4370 - 4380	4770 - 4780	5170 - 5180	5570 - 5580
4000 - 4010	4380 - 4390	4780 - 4790	5180 - 5190	5580 - 5590
4010 - 4020	4390 - 4400	4790 - 4800	5190 - 5200	5590 - 5600
4020 - 4030	4400 - 4410	4800 - 4810	5200 - 5210	5600 - 5610
4030 - 4040	4410 - 4420	4810 - 4820	5210 - 5220	5610 - 5620
4040 - 4050	4420 - 4430	4820 - 4830	5220 - 5230	5620 - 5630
4050 - 4060	4430 - 4440	4830 - 4840	5230 - 5240	5630 - 5640
4060 - 4070	4440 - 4450	4840 - 4850	5240 - 5250	5640 - 5650
4070 - 4080	4450 - 4460	4850 - 4860	5250 - 5260	5650 - 5660
XXXX - XXXX	4460 - 4470	4860 - 4870	5260 - 5270	5660 - 5670
4090 - 4100	4470 - 4480	4870 - 4880	5270 - 5280	5670 - 5680
4100 - 4110	4480 - 4490	4880 - 4890	5280 - 5280	5680 - 5690
XXXX - XXXX	4490 - 4500	4890 - 4900	5290 - 5300	5690 - 5700
4120 - 4130	4500 - 4510	4900 - 4910	5300 - 5310	5700 - 5710
4130 - 4140	4510 - 4520	4910 - 4920	5310 - 5320	5710 - 5720
4140 - 4150	4520 - 4530	4920 - 4930	5320 - 5330	5720 - 5730
4150 - 4160	4530 - 4540	4930 - 4940	5330 - 5340	5730 - 5740
4160 - 4170	4540 - 4550	4940 - 4950	5340 - 5350	5740 - 5750
4170 - 4180	4550 - 4560	4950 - 4960	5350 - 5360	5750 - 5760
4180 - 4190	4560 - 4570	4960 - 4970	5360 - 5370	5760 - 5770
4190 - 4200	4570 - 4580	4970 - 4980	5370 - 5380	5770 - 5780
4200 - 4210	4580 - 4590	4980 - 4990	5380 - 5390	5780 - 5790
4210 - 4220	4590 - 4600	4990 - 5000	5390 - 5400	XXXX - XXXX
4220 - 4230	4600 - 4610	5000 - 5010	5400 - 5410	5800 - 5810
4230 - 4240	4610 - 4620	5010 - 5020	5410 - 5420	5810 - 5820
4230 - 4240	4620 - 4630	5020 - 5030	5420 - 5430	5820 - 5830
4240 - 4250	4630 - 4640	5030 - 5040	5430 - 5440	5830 - 5840
4250 - 4260	4640 - 4650	5040 - 5050	5440 - 5450	5840 - 5850
4260 - 4270	4650 - 4660	5050 - 5060	5450 - 5460	5850 - 5860
4270 - 4280	4660 - 4670	5060 - 5070	5460 - 5470	5860 - 5870
4280 - 4290	4670 - 4680	5070 - 5080	5470 - 5480	5870 - 5880
4290 - 4300	4680 - 4690	5080 - 5090	5480 - 5490	5880 - 5890
4300 - 4310	4690 - 4700	5090 - 5100	5490 - 5500	5890 - 5900
4310 - 4320	4700 - 4710	5100 - 5110	5500 - 5510	5900 - 5910
4320 - 4330	4710 - 4720	5110 - 5120	5510 - 5520	5910 - 5920

VIRGINIA DIVISION OF MINERAL RESOURCES  
 Box 3667, Charlottesville, VA 22903

INTERVAL SHEET  
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Well Repository No.: W-6810

From-To	From-To	From-To	From-To	From-To
5920 - 5930	6320 - 6330	6720 - 6730	-	-
5930 - 5940	6330 - 6340	6730 - 6740	-	-
5940 - 5950	6340 - 6350	6740 - 6750	-	-
5950 - 5960	6350 - 6360	6750 - 6760	-	-
5960 - 5970	6360 - 6370	6760 - 6770	-	-
5970 - 5980	6370 - 6380	6770 - 6780	-	-
5980 - 5990	6380 - 6390	6780 - 6790	-	-
5990 - 6000	6390 - 6400	6790 - 6800	-	-
6000 - 6010	6400 - 6410	-	-	-
6010 - 6020	6410 - 6420	-	-	-
6020 - 6030	6420 - 6430	-	-	-
6030 - 6040	6430 - 6440	-	-	-
6040 - 6050	6440 - 6450	-	-	-
6050 - 6060	6450 - 6460	-	-	-
6060 - 6070	6460 - 6470	-	-	-
6070 - 6080	6470 - 6480	-	-	-
6080 - 6090	6480 - 6490	-	-	-
6090 - 6100	6490 - 6500	-	-	-
6100 - 6110	6500 - 6510	-	-	-
6110 - 6120	6510 - 6520	-	-	-
6120 - 6130	6520 - 6530	-	-	-
6130 - 6140	6530 - 6540	-	-	-
6140 - 6150	6540 - 6550	-	-	-
6150 - 6160	6550 - 6560	-	-	-
6160 - 6170	6560 - 6570	-	-	-
6170 - 6180	6570 - 6580	-	-	-
6180 - 6190	6580 - 6590	-	-	-
6190 - 6200	6590 - 6600	-	-	-
6200 - 6210	6600 - 6610	-	-	-
6210 - 6220	6610 - 6620	-	-	-
6220 - 6230	6620 - 6630	-	-	-
6230 - 6240	6630 - 6640	-	-	-
6240 - 6250	6640 - 6650	-	-	-
6250 - 6260	6650 - 6660	-	-	-
6260 - 6270	6660 - 6670	-	-	-
6270 - 6280	6670 - 6680	-	-	-
6280 - 6290	6680 - 6690	-	-	-
6290 - 6300	6690 - 6700	-	-	-
6300 - 6310	6700 - 6710	-	-	-
6310 - 6320	6710 - 6720	-	-	-