

Robert A. Morgan

THIS FORM MUST BE SIGNED BY AUTHORIZED PERSON:

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DM Form 7

(To be filled in by Division of Mines)

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF LABOR AND INDUSTRY

(To be filled in by Division of Mines)

WISE

County

LIPPS

District

CANEY RIDGE

Quadrangle

W5-37

File

DIVISION OF MINES

BIG STONE GAP, VIRGINIA

DEEPEMED
OIL AND GAS WELL COMPLETION REPORT
ABANDONMENT

(This report and a copy of electrical log, if made, must be submitted to the Division of Mines within 30 days after abandonment or completion of well, as required by Section 45-113, Code of Virginia, 1950.)

Well No. P-93

Permit No. 320

County Code 195

Well Classification DEVELOPMENT

Company Philadelphia Oil Company
Farm J. A. Odle
County Wise
Well No. (Company) P-93

Address P. O. Box 313
Nora, Virginia
Acres 740.03
District Lipps
Elevation (ground surface) 2141.04 ft.

Location: (Give direction and distance in feet from two (2) map coordinates (Latitude and Longitude) shown on location plat or map previously filed with the Division of Mines or shown on quadrangle topographic map of area.)

14,300 feet South of Latitude 37° 02' 30" and
9,500 feet East of Longitude 82° 25' 00"

Surface of tract is owned in fee simple by Clinchfield Coal Company
Address Dante, Virginia
Mineral rights are owned by Clinchfield Coal Company
Address Dante, Virginia

Location made by B. C. Spradlin
Drilling commenced April 19, 1979 Drilling contractor Union Drilling, Incorporated
Drilling completed April 29, 1979 Address P. O. Drawer 40, Buckhannon, W. Va.

Well completed as ^{gas} ~~oil~~ well on October 1, 1979

Well abandoned at _____ feet on _____: Reason _____
Well plugged on _____, 19____ Affidavit filed _____, 19____
Total depth 6088' feet. Steel line measurement _____ feet.
Commenced producing on not connected to pipeline system, 19____

Oil Well
Initial production, _____ Barrels per day.
Stimulation Record _____

Breakdown Pressure _____ psi; Average Injection Pressure _____ psi;
Average Injection Rate _____ BPM; Instant Shut-in Pressure _____ psi;
Min. Shut-in Pressure _____ psi;

Final Production _____ Barrels per day.

Gravity and grade of oil _____
Oil pays at (1) _____ feet to _____ feet. Oil shows at (1) _____ feet to _____ feet.
(2) _____ feet to _____ feet. (2) _____ feet to _____ feet.
(3) _____ feet to _____ feet. (3) _____ feet to _____ feet.
(4) _____ feet to _____ feet. (4) _____ feet to _____ feet.
Main production at _____ feet to _____ feet. (5) _____ feet to _____ feet.

Gas Well _____ Gaged _____ /10ths. Water in _____ inch.
 Initial open flow, gas: _____ /10ths. Mercury in _____ inch.
 Volume _____ Mcf.; Rock Pressure _____ lbs. hrs.
 Stimulation Record **The Brown Shale and Berea formations were treated together with**
90,000 lbs. sand, 1,000 gals. of Acid, 1,050 lbs. of gel and 57,000 gals. of
water. The Big Lime was acidized with 4,000 gals. of 28% HCL

Breakdown Pressure **1300** psi; Average Injection Pressure **2300** psi;
 Average Injection Rate **30** BPM; Instant Shut-in Pressure **Vacuum** psi;
 Min. Shut-in Pressure **Vacuum** psi.

Final Openflow **1,205** Mcf.; Rock Pressure **935** lbs. **10 Days** ~~xxx~~ hrs.
 Gas pays at (1) **5041** feet to **5062** feet. Gas shows at (1) **5688** feet to **5696** feet.
 (2) **4384** feet to **4357** feet. (2) **5714** feet to **5722** feet.
 (3) **4375** feet to **4378** feet. (3) **4314** feet to **4366** feet.
 (4) **5796** feet to **5834** feet. (4) **4391** feet to **4393** feet.
 Main production **5041** feet to **5062** feet. (5) _____ feet to _____ feet.

Fresh water at (1) **25** feet, **1/2" stream** GPM; (2) **70** feet, **1/8"** GPM; (3) **207** feet, **1" stream** GPM.
 Salt water at (1) _____ feet; (2) _____ feet; (3) _____ feet; (4) _____ feet.
 Coal: from **See log** feet _____ inches to _____ feet _____ inches; from _____ feet _____ inches to _____ feet _____ inches.

CASING AND TUBING				PACKERS OR BRIDGE PLUGS			
SIZE	USED IN DRILLING	LEFT IN WELL	PERFORATED	KIND	SIZE	SET AT	
(inch)	(feet)	(feet)	(feet) to (feet)				
16"	35	35		Frac-Over	4 1/2"	4986'	
11"	57	57					
8 5/8"	2223	2223					
4 1/2"		6030	5688-5834 5011-5062 4314-4394				
2 3/8"		4986		LINERS			
				SIZE	USED IN DRILLING	LEFT IN WELL	PERFORATED
				(inch)	(ft.)	(ft.)	(ft. to ft.)

Casing Cemented: **8 5/8** inch. from **2223** feet to **Surface** Date **April 23, 1979**
4 1/2 inch. from **6030** feet to **2095'** Date **April 30, 1979**
 _____ inch. from _____ feet to _____ Date _____

Remarks: (Shut down, depths, dates; fishing jobs, depths, dates; casing; other notes)

Samples or cuttings will be available for examination by a member of the Virginia Geological Survey _____ (Yes) ~~(No)~~
 Will be furnished the Virginia Geological Survey upon request _____ (Yes) ~~(No)~~ if sacks for same are furnished by the
 Survey _____ (Yes) ~~(No)~~

Electrical log made or not made _____ (check which.)
 Copy furnished herewith _____ or will be submitted on or by **previously submitted**, 19____
 Depths **Gamma-Ray** **surface to T.D.**
Density **2223 - T.D.**
Temperature **2223 - T.D.**

To operator requests that information given herein and log or logs be kept confidential for a period of ninety days
 after completion of the well covered by this report _____ (Yes) ~~(No)~~

LOG

Furnished by B. D. Hager Date 11-20-79

Compiled by Michael Wallen Date 11-20-79

GEOLOGIC AGE	FORMATION	GENERAL LITHOLOGY	COLOR	TOP (feet)	BOTTOM (feet)	THICKNESS (feet)	REMARKS OIL, GAS WATER DEPTHS SHUT DOWN FISHING, ETC.
	Soil			0	50	50	Water @ 25'
	Sand			50	76	26	1/2" stream
	Sand & Shale			76	145	69	Hole damp @ 70'
	Coal			145	147	2	
	Sand & Shale			147	552	405	Water @ 207'
	Coal			552	557	5	1" stream
	Sand & Shale			557	594	37	
	Shale			594	644	50	
	Sand & Shale			644	667	23	Sand & Shale
	Coal			667	671	4	
	Sand & Shale			671	1062	391	
	Coal			1062	1066	4	
	Sand & Shale			1066	1169	103	
	Shale			1169	1212	43	
	Sand & Shale			1212	1279	67	
	Coal			1279	1282	3	
	Sand & Shale			1282	1312	30	
	Coal			1312	1316	4	
	Sand & Shale			1316	1360	44	
	Shale			1360	1405	45	
	Sand & Shale			1405	1697	292	
	Coal			1697	1701	4	
	Sand & Shale			1701	1736	35	
	Coal			1736	1742	6	
	Shale			1742	1768	26	
	Sand & Shale			1768	1784	16	
	Coal			1784	1787	3	
	Sand & Shale			1787	1798	11	
	Shale			1798	1825	27	
	Coal			1825	1828	3	
	Shale			1828	1865	37	
	Sand & Shale			1865	2239	474	
	Red Rock			2239	2242	3	
	Red Rock & Shale			2242	2447	205	
	Sand & Shale			2447	2765	318	
	Ravencliff			2765	2988	223	
	Sand & Shale			2988	3245	257	
	1st Maxon			3245	3518	273	
	Sand & Shale			3518	3572	54	
	2nd Maxon			3572	3678	106	
	Shale			3678	3780	102	
	3rd Maxon			3780	3890	110	Gas Ck. @ 3818'
	Shale			3890	3946	56	No Show
	Little Lime			3946	3967	21	Gas Ck. @ 3942
	Shale & Sand			3967	4025	58	No Show
✓	Big Lime			4025	4410	385	Gas Ck. @ 4313
	Keener			4410	4686	276	2 MCF
✓	Wext			4686	4930	244	Gas Ck. @ 4541
	Coffee Shale			4930	5012	82	71 MCF
✓	Berea			5012	5100	88	Gas Ck. @ 4904
	Shale			5100	5860	760	26 MCF
	White Slate			5860	6088	228	Gas Ck. @ T.D.
	Total Depth			6088			26 MCF

NOTE: DRILLERS LOG ADJUSTED TO ELECTRIC LOGS

CR-8-1

OIL AND GAS WELL
SUMMARY REPORT

API No. 45-195-20320-00-03 VDMR Well Rep. No. _____

DMQ File No. WS-37

Operator PHILADELPHIA OIL COMPANY

Farm J. A. ODLE

Co. Well No. P-93

County WISE Quadrangle CANEY RIDGE - 7-1/2'

Location (UTM) N 4,095,850; E 371,100 UTM Zone 17

(Lat. and Long.) _____

Field _____ Province APPALACHIAN PLATEAUS

Elev. (specify) 2141.04' GR. TD 6088' Form. at TD CORNIFEROUS

INITIAL FLOW - 71,000 CU. FT. Age DEVONIAN

Date compl. or abandoned OCTOBER 1, 1979

Result GAS WELL

Gas Shows 5688' to 5696'; 5714' to 5722'; 4314' to 4316'; 4391' to 4393'

Gas Pays 5041' to 5062'; 4344' to 4357'; 4375' to 4378'; 5796' to 5834'

Main Production 5041' to 5062' Prod. Form. BIG LIME, BEREA; DEVONIAN
Age MISSISSIPPIAN; DEVONIAN

Treatment: THE BROWN SHALE AND BEREA FORMATIONS WERE TREATED TOGETHER WITH 90,000 POUNDS OF SAND, 1,000 GALLONS OF ACID, 1050 POUNDS OF GEL, AND 57,000 GALLONS OF WATER. THE BIG LIME WAS ACIDIZED WITH 4,000 GALLONS OF 28% HYDROCHLORIC ACID. WELL PERFORATED FROM 5688' to 5834'; 5011' to 5062'; AND 4314' to 4394'.

Initial Production _____
FINAL FLOW - 1,205,000 CU. FT.

Oil shows _____

Water FW X at 25' _____ at 70' _____ at 207'

SW _____ at _____ at _____ at _____

Coal 145' to 147'; 552' to 557'; 667' to 671'; 1062' to 1066'; 1279' to 1282'; 1312' to 1316'; 1697' to 1701'; 1736' to 1742'; 1784' to 1787'; 1825' to 1828'

Plat _____ Plotted _____ Completion Report _____

Drillers Log X Geologic Log _____

Samples _____ Interval Sheet _____

Sample Interval _____

Remarks _____

Geophysical Logs S.P. _____ Res _____ Gamma X Neutron _____

Density X Sonic _____ Other CALIPER; TEMPERATURE

Stratigraphic Data Source

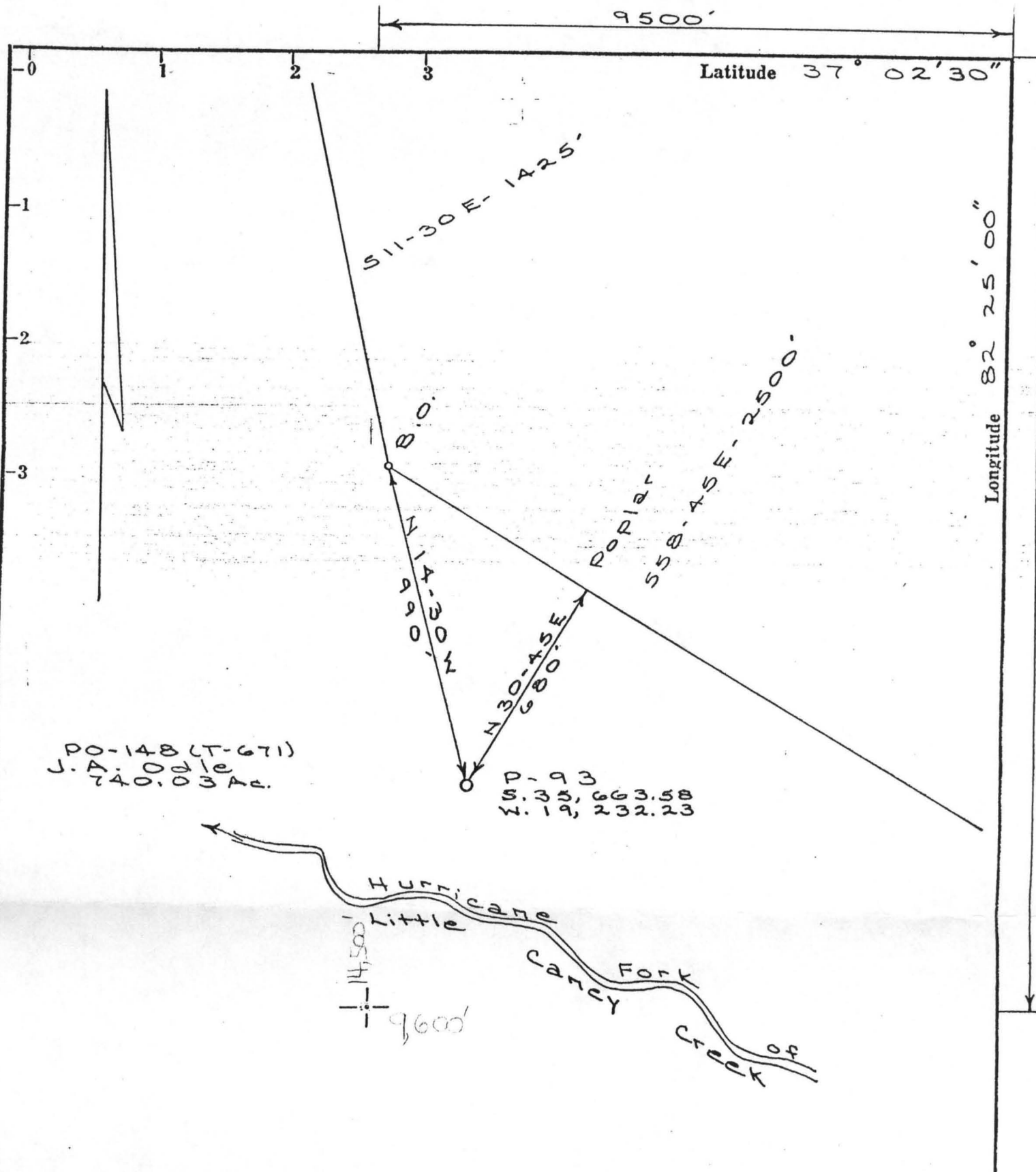
<u>Formation</u>	<u>Top</u>	<u>Datum (Subsea)</u>	<u>Thickness</u>

Remarks

References

Released to Open File: Completion DECEMBER 30, 1979
 Samples NONE

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



- Revised Plat -
Topo Coordinates changed

New Location.
 Drill Deeper.....
 Abandonment.....

Map No. 12 Block 270

Company Philadelphia Oil Co.
 Address Nora, Va.
 Farm J. A. Odle
 Tract Acres 740.03 Lease No. PO-148
 Well (Farm) No. _____ Serial No. P-93
 Elevation (Spirit Level) 2141.04'
 Quadrangle Caneey Ridge, Va.
 County Wise District HIPPS
 Surveyor B. C. Spradlin
 Surveyor Registration No. 782
 File No. _____ Drawing No. _____
 Date 3-6-79 Scale 1" = 400'

COMMONWEALTH OF VIRGINIA
 DEPARTMENT OF LABOR & INDUSTRY
 DIVISION OF MINES
 BIG STONE GAP

WELL LOCATION MAP
 FILE NO. WS 37

+ 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.
 - Denotes one inch spaces on border line of original tracing.