

Surface: % Alice Knight  
West Union, W.Va.  
Coal: Burl Ball, et al.  
228 South St. Clair Str.  
Painesville, Ohio

Minimum Error of Closure 1" in 200'

Source of Elevation Joseph Costilow Well #1 (Abd.) El. 867.84 ft.

- Fracture.....
- New Location.....
- Drill Deeper.....
- Abandonment.....

I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia.

Signed: A.C. Hillert

Map No. N37 Squares: N S 6 E W 7

Company	WOLF'S HEAD OIL REFINING CO., INC.
Address	P. O. BOX 1586, PARKERSBURG, W. VA.
Farm	Joseph Costilow
Tract	Acres <u>350</u> Lease No. <u>11900</u>
Well (Farm) No.	<u>W-3</u> Serial No. <u>(9)</u>
Elevation (Spirit Level)	<u>960.82</u> Ground
Quadrangle	<u>Centerpoint</u> SW
County	<u>Doddridge</u> District <u>Grant</u>
Engineer	<u>A.C. Hillert</u>
Engineer's Registration No.	<u>2534</u>
File No.	<u>1328</u> Drawing No.
Date	<u>March 24, 1966</u> Scale <u>1" = 800'</u>

STATE OF WEST VIRGINIA DEPARTMENT OF MINES OIL AND GAS DIVISION CHARLESTON
<b>WELL LOCATION MAP</b>
FILE NO. <u>000-1362</u> <u>61</u>
+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown.
- Denotes one inch spaces on border line of original tracing.



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION

*Min Phillips for Postman 6-17-66*

- Rotary
- Spudder
- Cable Tools
- Storage

Quadrangle CENTERPOINT  
Permit No. DOD-1362

**WELL RECORD**

Oil or Gas Well Oil & Gas  
(KIND)

Company WOLF'S HEAD OIL REFINING CO.  
Address P.O.Box 1588, Parkersburg, W. Va.  
Farm Joseph Costilow Acres 350  
Location (waters) \_\_\_\_\_  
Well No. W-3 (Serial No. 9) Elev. 960.82'  
District Grant County Doddridge  
The surface of tract is owned in fee by Alice Knight  
Address West Union, W.Va.  
Mineral rights are owned by Martha Ball  
Apt. 101, 267 W. Walnut St. Painesville, Ohio  
Drilling commenced April 19, 1966  
Drilling completed May 11, 1966  
Date Shot - From \_\_\_\_\_ To \_\_\_\_\_  
With \_\_\_\_\_  
Open Flow /10ths Water in \_\_\_\_\_ Inch  
/10ths Merc. in \_\_\_\_\_ Inch  
Volume Show Cu. Ft.  
Rock Pressure \_\_\_\_\_ lbs. \_\_\_\_\_ hrs.  
Oil Show bbls., 1st 24 hrs.  
WELL ACIDIZED -

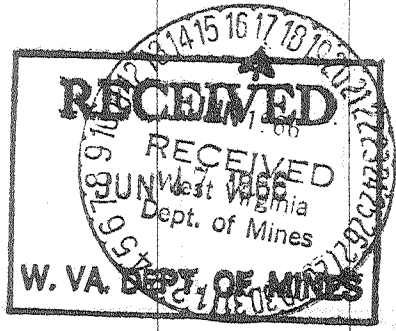
Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16 8-5/8"	340.1'	340.1'	Steel Shoe
13 5-1/2"	2053.7'	2053.7'	Guide Shoe
10			Float Collar
8 1/2"			8-5/8" Size of
6 5/8"			5-1/2" Depth set
5 3/16"			336'
3			2024'
2			2002'
Liners Used			Perf. top _____
			Perf. bottom _____
			Perf. top _____
			Perf. bottom _____

CASING CEMENTED 8-5/8" SIZE 336 No. Ft. 4/20/66 Date  
5-1/2" 2024 4/27/66

COAL WAS ENCOUNTERED AT \_\_\_\_\_ FEET \_\_\_\_\_ INCHES  
\_\_\_\_\_ FEET \_\_\_\_\_ INCHES  
\_\_\_\_\_ FEET \_\_\_\_\_ INCHES

WELL FRACTURED May 16, 1966: Used - 1,000 Bbls. Water - 60,000# Sand - 25 Gals. F-52  
200# J-111 - 400 Gals. Breakdown Acid - 40 Gals. Freeflow - 400# J-84  
RESULT AFTER TREATMENT Gas: 100 Mcf. Oil: 40 Bbls./Day *Big Injun*  
ROCK PRESSURE AFTER TREATMENT 550#  
Fresh Water \_\_\_\_\_ Feet Salt Water \_\_\_\_\_ Feet

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Clay, Shells and Shale			0	175			
Sand, Lime and Shells			175	195			
Red Bed and Sandy Shale			195	215			
Lime & Shale			215	325			
R.Rock & Shale			325	341			
Shale			341	363			
Sand, Shale and Lime			363	445			
Lime & Shale			445	520			
Sand & Shale			520	560			
Lime & Shale			560	585			
Sand & Shale			585	645			
Shale & Sand			645	670			
Lime			670	680			
Shale & Shells			680	795			
Sand & Shale			795	1445			
Shale			1445	1540			
Sand			1540	1600			
Shale			1600	1645			
Sand			1645	1710			
Shale			1710	1740			
Silts. & Sand			1740	1768			
Shale			1768	1888			
Little Lime			1888	1910			
Blue Monday			1910	1918			
Pencil			1918	1922			



Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Big Lime			1922	1990	Oil	2018-49	Show
Big Injun			1990	2049			
Total Depth				2049'			

Date June 15, 1966

APPROVED WOLF'S HEAD OIL REFINING CO., Owner

By A.C. Hilbert (Title) Engineer