

MINIMUM ERROR OF CLOSURE 1" in 200 M.W.

old well to Frac. SOURCE OF ELEVATION USGS BM P142 - Approx. 1 Mile East of Well on North Side of Rt 18

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."

Company Quaker State Oil & Refg. Co
 Address Box 1327 Parkersburg W. Va.
 Farm Joseph Freeman
 Tract 540 Acres _____ Lease No. _____
 Well (Farm) No. 1 Serial No. _____
 Elevation (Spirit Level) 760.0
 Quadrangle West Union SE
 County Doddridge District West Union
 Engineer J. F. Johnston
 Engineer's Registration No. 2492
 File No. _____ Drawing No. _____
 Date Sept 10, 1963 Scale 1" = 400'

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION
 CHARLESTON

WELL LOCATION MAP
 FILE NO. DOD-1058-FRAC

+ 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
COMPLETION WELL RECORD REVISED
WELL RECORD

Quadrangle West Union
Permit No. Dod.,-1058-Fracture

Oil or Gas Well Gas
(KIND)

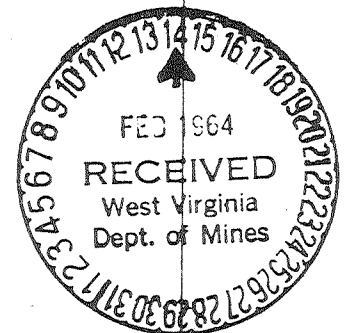
Company Quaker State Oil Refining Corporation
Address Box 1327, Parkersburg, W. Va.
Farm Joseph Freeman Acres _____
Location (waters) _____
Well No. 1 Elev. _____
District West Union County Doddridge
The surface of tract is owned in fee by _____
Address _____
Mineral rights are owned by _____
Address _____
Drilling commenced May 24, 1913
Drilling completed December 31, 1963
Date Shot _____ From _____ To _____
With _____
Open Flow _____ /10ths Water in _____ Inch
_____ /10ths Merc. in _____ Inch
Volume 250,000 Cu. Ft.
Rock Pressure _____ lbs. _____ hrs.
Oil _____ bbls., 1st 24 hrs.
WELL ACIDIZED _____
WELL FRACTURED See below

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13	30	30	
10	348		Size of
8 1/4	850		
6 5/8	1642	1642'	Depth set
5 3/16	1797	1797'	5-3/16" Casing
3			Perf. top 1728
2			Perf. bottom 1728
Liners Used			Perf. top 1740
			Perf. bottom 1746

See below
CASING CEMENTED _____ SIZE _____ No. Ft. _____ Date _____
COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES
_____ FEET _____ INCHES FEET _____ INCHES
_____ FEET _____ INCHES FEET _____ INCHES

RESULT AFTER TREATMENT 100,000 cu. ft. day
ROCK PRESSURE AFTER TREATMENT 150 Psig
Fresh Water 90' & 120' Feet Salt Water _____ Feet

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Coal, <u>Pittsburg</u>			375	375			
Sand, <u>Little Dunkard</u>			720	735			
Sand, <u>Big Dunkard</u>			835	860			
Gas Sand			980	1015			
First Salt Sand			1165	1305			
Second Salt Sand			1345	1490			
Maxton Sand			1560	1570			
Little Lime			1600	1620			
Pencil Cave			1625	1636			
Big Lime			1636	1712			
Sand, <u>Big Injun</u>			1712	1792	Gas 1926		
Squaw Sand			1794				
Total Depth				1827			



_____ pulled 1702' of 2" tubing and 2 x 6-5/8 Anchor Packer
_____ Gamma - Neutron - and Density Log by Schlumberger
_____ ran 1797' 5-3/16" Casing and cemented with 28 sacks Cement
_____ opened Hole Frac - 1800' to 1805'
_____ frac with 12,400 gals. water 6000# 20-40 and 6000# 10-20 Sand
_____ perforated 36 holes 1740' - 1746'
_____ frac with 14,700 gals. water 6000# 20-40 and 6000# 10-20 Sand
_____ perforated 24 holes 1722' - 1728'
_____ frac with 15,200 gals. water 6000# 20-40 and 6000# 10-20 Sand
_____ Date Completed December 31, 1963

West Union District, Doddridge County, W. Va.

W.....
 G. S. Swiner, Contractor.

Vernon, 752, 11'

Drilling commenced May 24, 1912; completed.....

1 1/2" casing, 30'; 1 3/4" tubing, 348'; 2 1/2" tubing, 350'; 3" tubing, 1612'.

Reamed with 2" tubing, 1805'. Bottom 2" anchor packer set 107' off bottom. 2" Hoffman seat coupling.

Nov. 4, 1911. Reamed with 2" tubing. Top of perforation 25' from bottom.

Spung anchor packer set at 1700'. Total depth, 1827 ft.

Record in Western Petroleum Co. Well Record book of Clifton Oil & Gas Co.

	Top.	Bottom.
(center, 90'; more water, 120')		
Pittsburgh Coal	375	375'
Little Richard Sand	720	735
Big Richard Sand	835	860
Gas Sand	980	1025
First Salt Sand	1165	1305
Second Salt Sand	1345	1490
Horton Sand	1560	1570
Little Mass	1600	1680
Small Mass	1685	1696
Big Mass	1696	1712
Big Injun Sand (gas, 1726'; 250 H. cu.ft.)	1712	1792
Sugar Sand (gas, 1792')	1792
Total depth (did not drill through sand)		1805
Total depth (deepened?)		1827