

NOTE - ELEVATION TAKEN FROM USGS "825" ELEVATION 825.80' ABOUT 2.1 MILES SE ALONG STATE HIGHWAY 18 FROM JUNCTION U.S. 50. AT WEST UNION, 18' WEST OF & RT. 18, IN TOP OF THE ROCK WING WALL AT THE SE CORNER OF A 15' CONCRETE BRIDGE. A STANDARD TABLET STAMPED "34 JEA "82J" 1962.

THE ACCURACY OF THIS SURVEY IS WITHIN THE LIMITS PRESCRIBED BY THE OIL AND GAS DIVISION OF THE DEPARTMENT OF MINES.

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.

New Location
 Drill Deeper
 Abandonment

Company CITIES SERVICE OIL COMPANY
 Address BOX 873, CHARLESTON, W.VA.
 Farm LEWIS MAXWELL
 Tract _____ Acres 640 Lease No. C-32-F
 Well (Farm) No. F-22 Serial No. GW-1475
 Elevation (Spirit Level) 1011.69
 Quadrangle WEST UNION-7 S421 W-084
 County DODDRIDGE District WEST UNION
 Engineer Wendell S. Moore
 Engineer's Registration No. 2113
 File No. _____ Drawing No. W-26-63
 Date 30 SEPT. 63 Scale 1"=400'

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

WELL LOCATION MAP
 FILE NO. Do 2-1062

+ 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.

Samples 395' - 1369'

Bag all samples

66099



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION 6

Quadrangle West Union 7 SW

Permit No. Dod-1062

WELL RECORD

Oil or Gas Well Gas
(KIND)

Company Cities Service Oil Company
Address P. O. Box 873, Charleston 23, W. Va.
Farm Lewis Maxwell Acres 640
Location (waters) Rt. Br. Bluestone Run
Well No. F-22, CW-1475 Elev. 1011.69'
District West Union County Doddridge
The surface of tract is owned in fee by Leeman Maxwell III
Address West Union, W. Va.

Mineral rights are owned by Mrs. Grace Gaylord, etal
420 Kemmerer Rd. Address State College, Pa.

Drilling commenced 11-13-63
Drilling completed 12-6-63
Date Shot not shot From _____ To _____
With _____

Open Flow _____ /10ths Water in _____ Inch
_____ /10ths Merc. in _____ Inch

Volume all gas 239M Cu. Ft.

Rock Pressure _____ lbs. _____ hrs.

Oil _____ bbls., 1st 24 hrs.

WELL ACIDIZED not acidized

WELL FRACTURED see reverse side

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			<u>Anchor packer</u>
10 3/4" 32#	64'	64'	Size of <u>4-1/2"</u>
8 1/4" 24#	634'	634'	Depth set <u>1792'</u>
7" 23#	1071'	<u>pulled</u>	
9.5#	1934'	1934'	
3			Perf. top
2			Perf. bottom
Liners Used			Perf. top
			Perf. bottom

CASING CEMENTED _____ SIZE _____ No. Ft. _____ Date _____

see reverse side

COAL WAS ENCOUNTERED AT none FEET _____ INCHES

_____ FEET _____ INCHES FEET _____ INCHES

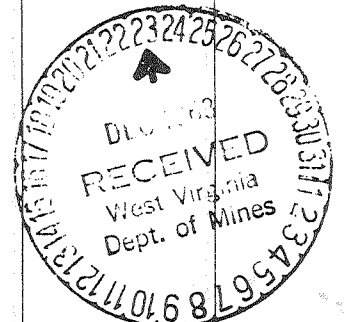
_____ FEET _____ INCHES FEET _____ INCHES

RESULT AFTER TREATMENT 10# spring gauge in 3" = 4,966 MCF

ROCK PRESSURE AFTER TREATMENT 72 hours 620#

Fresh Water 115' Feet Salt Water _____ Feet

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Red Rock			0	29			
Lime			29	45			
Red Rock			45	52			
W. Slate			52	65			
Slate and Shells			65	142	F. water	115'	4 blrs/hr.
Red Rock			142	155			
Sand			155	170			
Red Rock			170	210			
Sand			210	300			
Red Rock			300	317			
Slate			317	326			
Lime			326	354			
Slate and Shells			354	381			
Lime			381	402			
Slate and Shells			402	474			
Lime			474	492			
Red Rock			492	499			
Slate and Shells			499	530			
Sand			530	560			
Lime			560	585			
Slate and Shells			585	629			
Lime			629	640			
Slate and Shells			640	713			
Red Rock			713	738			
Lime			738	751			
Slate and Shells			751	770			
Sand			770	785			



Formation	Color	Hard or Soft	Top 6	Bottom	Oil, Gas or Water	Depth Found	Remarks
Slate and Shells			785	807			
Red Rock			807	821			
Slate and Shells			821	845			
Lime			845	875			
Slate			875	920			
Lime			920	926			
Sand			926	988			
Slate and Shells			988	1058			
Sand			1058	1152			
Slate and Shells			1152	1200			
Sand			1200	1298			
Slate and Shells			1298	1485			
Sand			1485	1530			
Slate and Shells			1530	1668			
Lime			1668	1680			
Slate			1680	1684			
Lime			1684	1708			
Blue Monday Sand			1708	1736			Temperature Log showed gas
Big Lime			1736	1806			1515'
Big Injun Sand			1806	1885			1520-35'
Shale			1885	1925			1824-34'
							1868'
							1879'
Test depth-----				1925'			
Plugged back depth-----				1906'			
Schlumberger showed:							
3rd Salt Sand			1502	1537			
Big Lime			1537	1814			
Big Injun			1814	1887			
Ran Logs: Induction, Gamma Gamma, Gamma Ray, Temperature and Caliper.							
Perforated 1824-42' 1877'							
<u>FRACTURED THE BIG INJUN 12-11-63</u>							
Pumped in 500 gallons MCA, 2000 gallons regular acid. Broke down at 2,500#-displaced acid. Injected 40,000# sand with 532 barrels water and sand. Average injection rate 38 bbls. per minute. Maximum sand concentration 3#/gallon. After one half of treatment injected 21 perf balls. Pressure increased from 2,100# to 2,600#. Flushed with 1,600 gallons water. Used 120,000 SCIF Nitrogen - 4 minutes after shut down 1,400# - opened well. Final open flow 12-12-63 10# spring gauge in 3" = 4,966 MCF.							
<u>CASING RECORD</u>							
11-21-63	Ran 8-5/8" casing at 631'DLM with shoe set in 20' red mud.						
11-25-63	Ran 7" casing at 1,058'DLM with shoe - set in 20' red mud.						
12-7-63	Ran 4-1/2" 9.5# casing at total depth - Anchor Packer set at 1,792' - R/L nipple at 1,141' - 3 centralizers. Float insert at 1,892'. Killed well with water and cemented with 70 sacks.						

Date December 17, 1963

APPROVED Cities Service Oil Company, Owner
 By W. S. Moore, Division Sup't
 (Title)