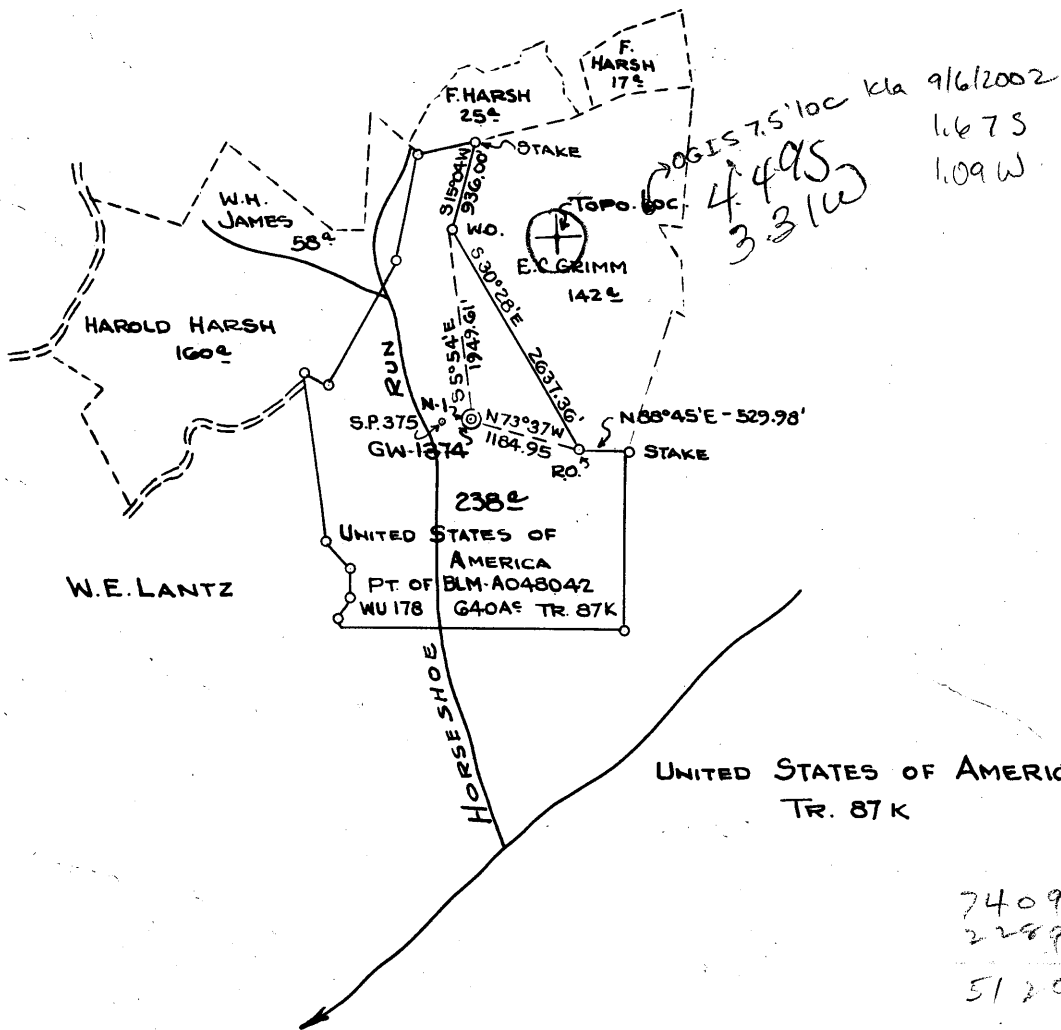


1 2 3

Latitude 39° 20'
39° 17' 30"

79° 32' 30"
79° 30'
Longitude



New Location
 Drill Deeper
 Abandonment

Calc 15' loc

4.55S
3.32W

~~4.55~~ S. 4.50-S
~~3.375~~ W. 3.30-W
7 SW (F-13)

Company COLUMBIAN CARBON Co.
 Address Box 873 CHARLESTON, W.VA.
 Farm UNITED STATES OF AMERICA ETAL
 Tract 87K Acres 238 Lease No. BLM-A048042
 Well (Farm) No. N-1 Serial No. GW-1374
 Elevation (Spirit Level) 2289.27' Aurora 7.5' good
 Quadrangle KINGWOOD 75E S 455 SE W 337
 County PRESTON District UNION
 Engineer R. B. Anderson
 Engineer's Registration No. 2074
 File No. _____ Drawing No. W-18-62
 Date 5-1-62 Scale 1" = 2000'

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

WELL LOCATION MAP
 FILE NO. PRES-99

+ 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 / 7

Quadrangle Kingwood 7 SW

Permit No. Pres. 99

WELL RECORD

Oil or Gas Well Gas
(KIND)

Company Cities Service Oil Co.
Address Box 873, Charleston 23, W. Va.
Farm United States of America Acres 640
Location (waters) Horseshoe Run
Well No. N-1, GW-1374 Elev. 2289.27'
District Union County Preston
The surface of tract is owned in fee by Bureau of Land Management
Interior Bldg. Address Wash. D. C.
Mineral rights are owned by same
Address _____
Drilling commenced 5-29-62
Drilling completed 2-7-63
Date Shot not shot From _____ To _____
With _____
Open Flow /10ths Water in _____ Inch
/10ths Merc. in _____ Inch
Volume _____ 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			
16" 42.5#	22'7"	22'7"	Kind of Packer _____
13 3/8" 48#	1206'	1206'	<u>none</u>
9-5/8"	4687'1"	4687'1"	Size of _____
8 3/4" 28#	9237'9"	9237'9"	Depth set _____
4-1/2" 52/48 11.6#	1516'6"	1516'6"	
3			Perf. top _____
23/8" 4.7#	7398'	7398'	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 Oris. B. H. 10/10 M. 2" = 492MCF -- Tuscarora (Tub) 20/10 M. 2" = 696 MCF total 1188M
ROCK-PRESSURE AFTER TREATMENT Tubing 72 hrs. 1800# - B. H. 92 hrs. 1560#
Fresh Water 167' 210' 239' Feet _____ Salt Water _____ Feet _____

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
<u>The following is the sample log for this well</u>							
Siltstone			0	80			
Sand			80	210	F. water	167'	2/3-16" blr/hr.
Siltstone-S hale streaks			210	490	F. water	210'	1-1/2 blr/hr.
Siltstone - Shale & Sand streaks			490	630	F. water	239'	hole full
Red & Gray Shale, sand streaks			630	820			
Shale, Siltstone & Sand streaks			820	1148			
Sand			1148	1170			4434
Siltstone and Shale			1170	2700	4303	2289	2289
Shale - Siltstone streaks			2700	3200	2289	2289	2145
Shale			3200	3700	2014	5518	
Brown Shale			3700	3830			
Gray and Brown Shale			3830	3980			
Gray Shale			3980	4095			4554
Brown Shale			4095	4303			2289
Chert - <u>Huntsville</u>			4303	4422			2265
Shale - <u>Needmore</u>			4422	4434			
Oriskany			4434	4554			
Lime - Chert			4554	4665			
no samples			4665	4700			
Dolomitic Lime and Shale			4700	4780			
Dolomite			4780	4810			
Chert			4810	4815			
Dolomitic Lime and Shale			4815	4830			
Chert			4830	4850			
Lime & Chert, Shale & Dolomite			4850	5150			
Lime - streaks Shale & Dolomite			5150	5600			



Formation	Color	Hard or Soft	Top 17	Bottom	Oil, Gas or Water	Depth Found	Remarks
Dolomite-Lime Shale & Anhydrite			5600	6150			
Lime and Shale			6150	6195			
Sand and Shale			6195	6280			
Shale and Lime			6280	6530			
Lime			6530	6550			
Shale and Lime			6550	6610			
Dolomitic Shale-Red Shale, sand			6610	6650			
Red, Gray & Green Shale			6650	7046			
Shale, Sand			7046	7150			
Gray and Red Shale			7150	7180	Gas	7375'	est. 200-300M
Tuscarora Sand			7180	7807	Gas	7431-35'	29/10 W. 7" 22# = 2, 323MCF
Juniata, Red Sand, Red Shale and Siltstone			7807	12,030'			
				615			
Total depth-----				12,030'			
Plugged back to-----				7,409'			

CASING RECORD

5-29-62	Ran 16" drive pipe.						
6-28-62	Ran 13-3/8" casing at 1,200' DLM- cemented with 300 sacks.						
8-5-62	Ran 9-5/8" casing at 4,665' Rotary Meas. = 4651' Landing Flange. Ran 2 joints 32.30# 1953' to 2013' off bottom. Rest of casing 10#. Ran 9 jts. of long T&C on top of string, 7 centralizers thru Chert and Oriskany sections-differential fill up collar 32' off bottom. Whirler guide shoe on bottom. Circulated gel and added 143 sacks Baroid to mud ahead of cement. Cemented with 300 sacks. Pumped plug to 4,629' at 650# maximum pressure.						
12-20-62	Ran 7" 26# and 23# at 9,162' Rotary = 9148' Landing Flange. Float shoe on bottom. Float collar top of bottom joint. Centralizers 9135' 9035' 8850' 8550' 8150' 7850' 7700' 7580' 7460' 7340' 7220' 7100' 6980' and 6860'. Cemented with 210 sacks 50% Pozmix - cement mixed with 4% gel.						
1-63	Ran 4-1/2" 5,965' to 7,475' - 7 centralizers on 2nd, 5th, 8th, 11th and 14th joints - 3 joints from top and top joint. Pumped in 200 sacks cement.						

CCL + post 1000 ft ;
 parts 4435.5 - 4438.5
 Oriskany - 12 shots

7807
 2289
 5518

Preston-49 GA-1374, U. S. of America N-1

CORES - 8172' Siltstone with iron-stained clay matrix.

Preston-99 GA-1374, USA N-1

Sample No.	Depth Ft.	Perm. md.	Porosity %	Carbonate %	Bulk Density gm/cc	Grain Density gm/cc
P-1 Horizontal	8172	0.00	1.0	0.96	2.73	2.75
P-1 Vertical	8172	0.00	1.0		2.74	2.75

Date July 12, 1963

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