

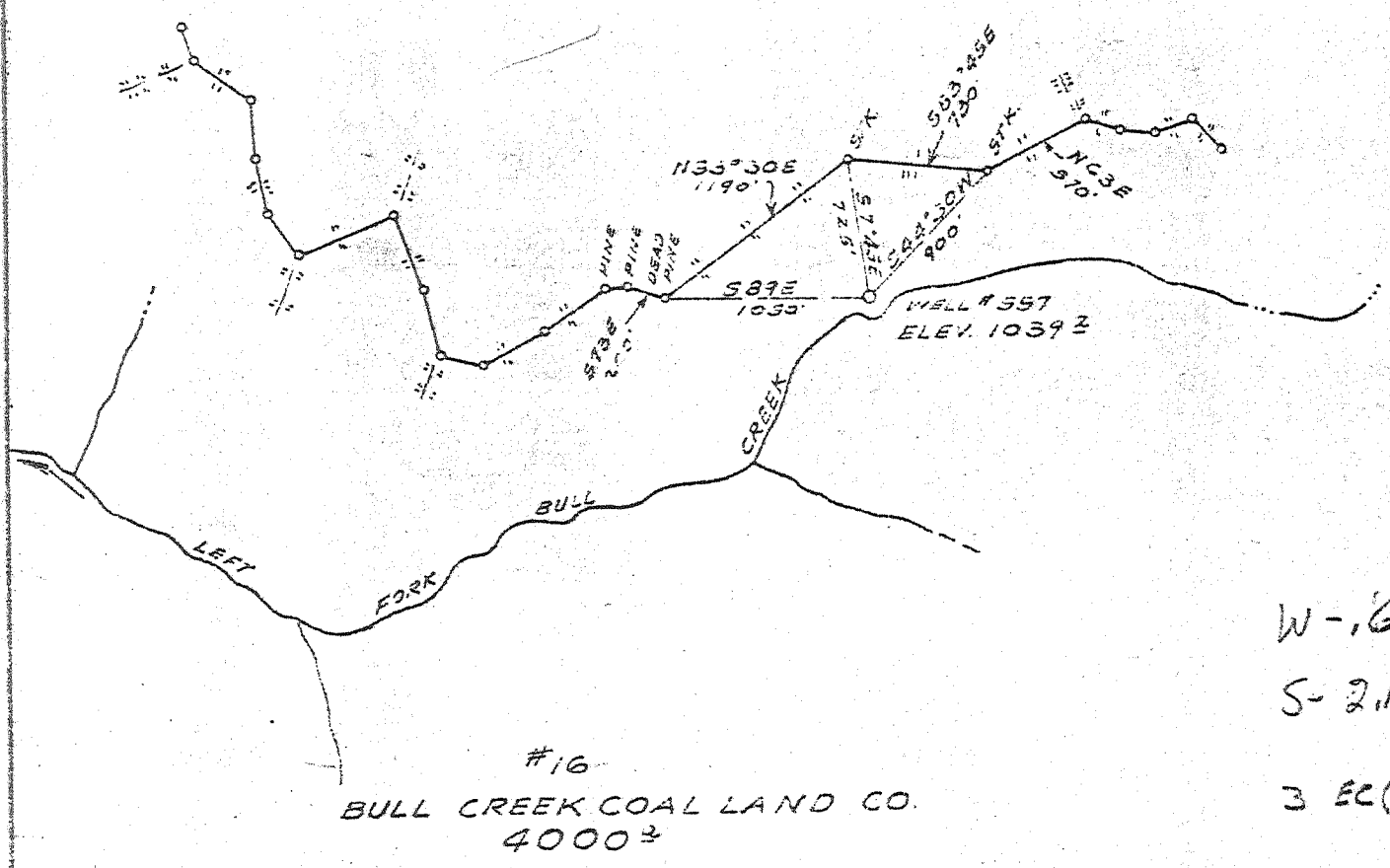
Latitude 38° 15'

Longitude 81° 40'

2178
D69W



PENNSYLVANIA & VIRGINIA COAL & COKE CO.



W-169
S-218
3 EC (A-5)

New Location X
Drill Deeper
Abandonment

Company THE OWENS, LIBBEY-OWENS GAS DEPT.
 Address BOX 1375 CHARLESTON, W. VA.
BULL CREEK COAL LAND CO.
 Tract _____ Acres 4000 Lease No. 16
 Well (Form) No. 14 Serial No. 557
 Elevation (Spirit Level) 1039.2
 Quadrangle PEYTONA-N.W.
 County BOONE District PEYTONA
 Engineer T. S. Flower
 Engineer's Registration No. 269
 File No. _____ Drawing No. _____
 Date JULY 24, 1939 Scale 1" = 1000'

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

WELL LOCATION MAP
FILE NO. B00-446

+ 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.

6-6 239

Sampler J-B (4.6 G) 1362-4689' Deep Well ✓

WEST VIRGINIA DEPARTMENT OF MINES
OIL & GAS DIVISION
W E L L R E C O R D

Permit No. 300-446
Paytona Quad.

Gas Well

CASING & TUBING

Company	The Owens, Libbey-Owens Gas Dept.	10	358	358
Address	Box 1375, Charleston, W. Va.	8-1/4	1385	1385
Farm	Bull Creek Coal Land Co. ACRES 4000	6-5/8	1641	
Location	Bull Creek	5-3/16	4569	4569
Well No.	557 ELEV. 1039	3	4637	4637
District	Paytona - Boone County			
Surface & Mineral Address	Bull Creek Coal Land Co., 686 Ellicott Square, Buffalo, New York			Packer - Spans; Comb. Size - 2-3/8 x 5-1/2 Depth set - 4583 Perf. top - 4655 " bot. - 4637
Commenced	Feb. 6, 1940			
Completed	May 10, 1940			
Volume	B. Line & B. Injun 217,000 c.f. Oriskany 450,000 c.f.			CASING CEMENTED: 230' - 5-3/16 - 4/18/40
Rock Pressure	Oriskany 1200 lbs. - hrs.			Coal at 77' 24"
Fresh Water	79			
Salt Water	815			

Surface & Clay	yl	s	0	31		Slate&Shells	dk	s	1897	1938
Slate	wh	s	31	51		Shell	dk	h	1938	1973
Sand	dk	s	51	77		Slate&Shells	dk	s	1973	2014
Coal	dk	s	77	79	HFTtr. W 79	Shale	bn	s	2014	2021
Slate	dk	s	79	117		Berea Sand	gr	h	2021	2028
Sand	wh	h	117	137		Slate	dk	s	2028	2031
Slate	dk	s	137	256		Shell	dk	h	2031	2056
Sand	gr	h	256	286		Shells	gr	h	2056	2148
Slate	dk	s	286	346		Slate&Shells	gr	s	2148	2194
Sand	gr	h	346	392		Slate	gr	s	2194	2208
Slate	dk	s	392	398		Shell	dk	h	2208	2220
Sand, broken	dk	s	398	457		Slate	dk	s	2220	2232
Sand	wh	m	457	544		Slate&Shells	dk	s	2232	2306
Slate	dk	s	544	564		Slate&Shells	lt	s	2306	2336
Shell	dk	h	564	574		Slate&Shells	dk	s	2336	2451
Slate	lt	s	574	583		Shell	gr	h	2451	2529
Sand	wh	s	583	640		Slate	gr	s	2529	2902
Slate	dk	s	640	646		Slate	lt	s	2902	2984
Sand	wh	s	646	754		Slate&Shells	gr	s	2984	3091
Slate	wh	s	754	758		Slate	gr	s	3091	3120
Sand	gr	h	758	777		Shells	gr	h	3120	3230
Slate	gr	s	777	782		Slate	dk	s	3230	3242
Sand	wh	s	782	814		Shells	dk	h	3242	3275
Slate	dk	s	814	820	HFTSW 815	Slate&Shells	dk	s	3275	3312
Sand	dk	s	820	834		Shells	dk	h	3312	3364
Slate	dk	s	834	865		Slate&Shells	gr	s	3364	3497
Sand	dk	s	865	1122		Shale	bn	s	3497	3521
Sand	gr	h	1122	1206		Shells	gr	h	3521	3541
Red Rock	rd	s	1206	1211		Slate&Shells	gr	s	3541	3598
Shell	dk	h	1211	1235		Shale	bn	s	3598	3619
Slate&Shells	dk	s	1235	1252		Shale&Shells	bn	s	3619	3660
Red Rock	rd	s	1252	1264		Shale	bn	s	3660	3773
Shell	dk	h	1264	1298		Slate&Shells	dk	s	3773	3810
Sand	dk	h	1298	1312		Slate & some shells	wh	s	3810	4170
Line	dk	h	1312	1357		Slate	dk	s	4170	4238
Big Line	gr	h	1357	1376		Shale	bn	s	4238	4351
Big Line	wh	h	1376	1385		Shale&Shells	bn	s	4351	4389
Big Line	dk	h	1385	1400		Shale	bn	s	4389	4494
Big Line	gr	h	1400	1424	Gas 1424	Shale	bk	s	4494	4550
Big Line	wh&gr	h	1424	1558	Gas 1497 424 MCF	Corniferous Lime	gr	4550	4569	hard? 4550-4647
Injun Sand	rd	h	1558	1565	30 MCF	"	bn	4569	4648	hard 4647
Injun Sand	rd	s	1565	1594	Gas 1565- 1587 85 MCF	Oriskany Sand	wh	h	4648	4670 Gas 4649-4647- 4653 421MCF 4672
Slate&Shells	dk	s	1594	1637		Lime + H&G	bn	h	4670	4687 - 4672
Shell	dk	h	1637	1641		Total Depth				4687
Shell	dk	h	1641	1897						

485



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

Quadrangle Peytona
Permit No. 800-446-Rev.

WELL RECORD

Oil or Gas Well Gas
(KIND)

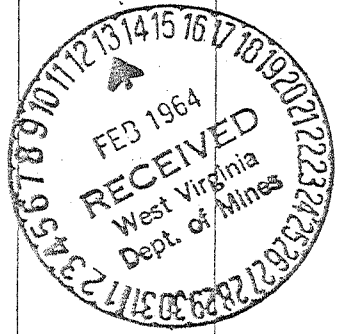
Company OWENS, LIBBEY-OWENS GAS DEPARTMENT
Address P. O. Box 4168, Charleston, W. Va.
Farm Bull Creek Coal Land Co. Acres 4,000
Location (waters) _____
Well No. 15 (Serial No. 557) Elev. 1039
District Peytona County Boone
The surface of tract is owned in fee by _____
Address _____
Mineral rights are owned by Bull Creek Coal Land Co.
44 Lyman Road, Buffalo Address 26, New York
Drilling commenced June 19, 1963
Drilling completed July 31, 1963
Date 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 _____
WELL FRACTURED See below

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13			Size of
10			
8 1/4			Depth set
6 1/2			
5 3/16 1/2	4569'	664' 4"	Perf. top
3 1/2 4-1/2"	1611' 5"	1611' 5"	Perf. bottom
2 - 3/8	4688' 8"	503' 11"	Perf. top
Liners Used			Perf. bottom

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

RESULT AFTER TREATMENT Big Injun Sand 973 MCF
ROCK PRESSURE AFTER TREATMENT 302# in 12 Days
Fresh Water _____ Feet Salt Water _____ Feet

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
As completed 5/10/40:							
					6-21-63 Pulled total of 4690' 1" 2-3/8" tubing		
					6-25-63 Installed 2-3/8" tubing at 4,688 ft.		
					6-26-63 Dowell ran 25 sacks cement from 4687 to 4462 ft. Pulled 15' 2-3/8" tubing		
					7-1-63 Pringle Shooting Co. shot off 2-3/8" tubing at 4200 ft.		
					7-2-63 Pulled 4184' 9" of 2 3/8" tubing leaving 503' 11" of tubing in hole.		
					7-8-63 5-1/2" casing ripped at 3916 ft.		
					7-10-63 Pulled 3904' 8" of 5-1/2" casing. Test after pulling casing: 45.7 M		
					7-12-63 hole bridged at 3858 ft.		
					Rock		3858 to 3828
					Cement (5 bags)		3828 to 3808
					7-15-63 Rock bridge		1980 to 1930
					Cement (5 bags)		1930 to 1910
					7-16-63 Rock bridge		1660 to 1620
					Cement (3 bags)		1620 to 1610



Formation	Color	Hard or Soft	Top /	Bottom	Oil, Gas or Water	Depth Found	Remarks
					SIM 1620 ft.		
					<u>7-18-63</u>		
					McCullough ran gamma-ray, temperature and density logs. Logs run from 8-5/8" casing to 1609 ft.		
					<u>7-24-63</u>		
					Installed 4-1/2" casing at 1608 ft. on a shoe. Well Service cemented in the 4-1/2" casing from 1609 to 1406 ft. with 45 sacks Alpha cement and 10 gal. reishment.		
					<u>7-25-63</u>		
					McCullough ran Depth Control Log and perforated the 4-1/2" casing at 1574' with one triple frac notch.		
					<u>7-29-63</u>		
					Dowell riverfracc the Big Injun Sand using 30,000 lbs. of 20-40 sand, 250 gal. mud acid, 531 barrels water and 60,000 std. cu. ft. of nitrogen.		
					<u>7-31-63</u>		
					5:30 P.M., 973 M		Hole dry.

Date February 7, 1964

APPROVED OWENS, LIBBEY-OWENS GAS DEPARTMENT, Owner

By A. H. Smith, Mgr. (Title) Land, Engrg. & Geol.