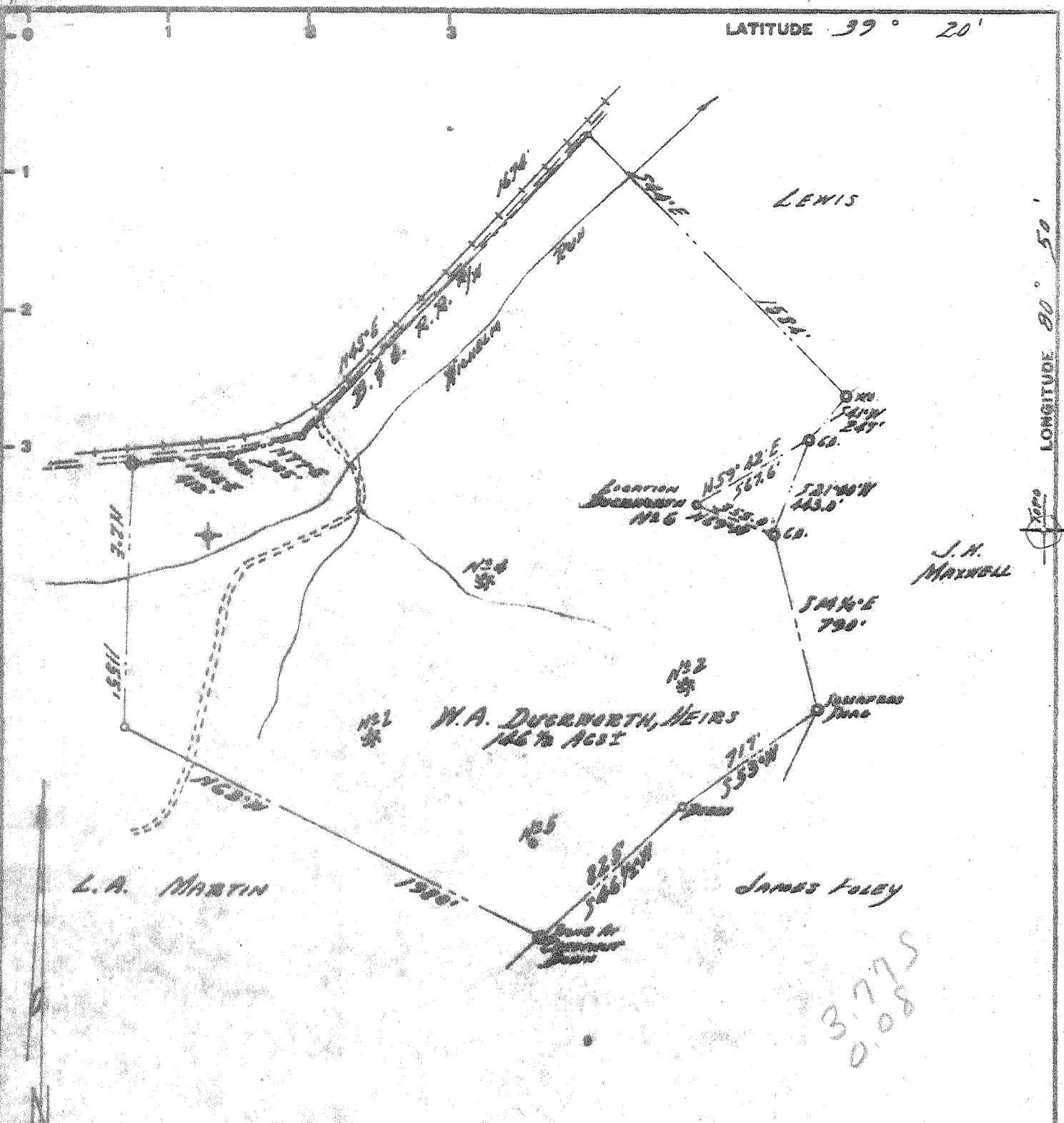


M



Minimum Error of Closure 1/2,000  
 Source of Elevation Ben Thompson at the Gay Lick Road 10 Mi. S.W. of Location

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.

- Fracture
- New Location
- Drill Deeper
- Abandonment

Signed: Paul G. Dean  
 Squares: N S E W

Company N. G. CLARK, ETC.  
 Address Box 427, CHARLESTON 23, W. Va.  
 Farm W. A. DUCKWORTH, HEIRS  
 Tract 1 Acres 106 1/2 Lease No. \_\_\_\_\_  
 Well (Farm) No. Six Serial No. \_\_\_\_\_  
 Elevation (Spirit Level) 1090  
 Quadrangle West Union Sc  
 County Doddridge District CENTRAL  
 Engineer Paul G. Dean  
 Engineer's Registration No. 1856  
 File No. 196-7-26 Drawing No. 66-12  
 Date MAY 6, 1966 Scale 1" = 600'

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

**WELL LOCATION MAP**

FILE NO. DOD-1468

† 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.

3.775  
0.08



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION 4

- Rotary
- Spudder
- Cable Tools
- Storage

WELL RECORD

Oil or Gas Well Oil

Location West Union  
 Permit No. DD-1465  
 Company N. G. Clark et al  
 Address Box 437 Charleston, W. Va. 25303  
 Location A. Duckworth Mts. Acres 146 1/2  
 Location (waters) Wilhelm Run  
 Well No. 514 Elev. 1000  
 District Central County Doddridge  
 The surface of tract is owned in fee by N. A. Duckworth  
Mrs. Address West Union, W. Va.  
 Mineral rights are owned by Same  
 Address Same  
 Drilling commenced August 7, 1967  
 Drilling completed September 5, 1967  
 Date Shot From To

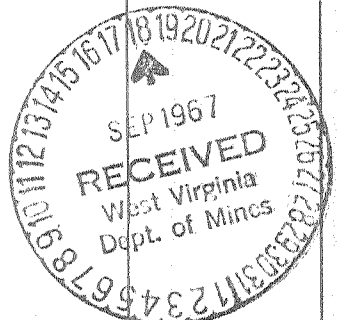
Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16	0	0	
13			Size of
10	000	None	Depth set
8 1/2	1204	None	
6 1/2			
5 3/16			
4 1/4	2224	2224	Perf. top
3			Perf. bottom
2			Perf. top
Liners Used			Perf. bottom

Open Flow /10ths Water in Inch  
 /10ths Merc. in Inch  
 Volume Shaw Cu. Ft.  
 Rock Pressure None taken lbs. hrs.  
 Well Shaw bbls., 1st 24 hrs.  
 WELL ACIDIZED (DETAILS)  
 WELL FRACTURED (DETAILS) 600 bbl. of water and 30,000 lbs of sand.

Attach copy of cementing record.  
 CASING CEMENTED 4 1/2" SIZE 2224 No. Ft. 0-0-67 Date  
 Amount of cement used (bags) Fifty  
 Name of Service Co. Donell  
 COAL WAS ENCOUNTERED AT None FEET INCHES  
 FEET INCHES FEET INCHES  
 FEET INCHES FEET INCHES

RESULT AFTER TREATMENT (Initial open Flow or bbls.) 200,000 Cu. ft. gas and 10 bbls oil  
 ROCK PRESSURE AFTER TREATMENT None taken HOURS  
 Fresh Water 000 Feet 1 bailer an hr. Salt Water Feet  
 Producing Sand Injun Depth 2224 ft.

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
11	Yellow	Soft	0	0			
ay	Grey	Soft	0	20			
d Rock	Red	Soft	20	15			
ate	Grey	Soft	35	40			
d Rock	Red	Soft	60	55			
ate	Grey	Soft	82	87			
d Rock	Red	Soft	87	128			
ate	Grey	Soft	128	133			
d Rock	Red	Soft	133	223			
ate	Grey	Soft	223	228			
nd	White	Hard	228	250			
ate	Grey	Soft	250	260			
d Rock	Red	Soft	260	308			
ate	Grey	Soft	308	355			
d Rock	Red	Soft	355	372			
ate	Grey	Soft	372	386			
d Rock	Red	Soft	386	525			
ate	Grey	Soft	525	573			
d Rock	Red	Soft	573	583			
ms	White	Hard	583	597			
d Rock	Red	Soft	597	651			
ate-Shell	Grey	Soft	651	662			
nd	White	Hard	662	721	Water	665	1 bailer an hr
ate-Shell	Grey	Soft	721	726			
ms	White	Soft	726	748			
ate-Shell	Grey	Soft	748	805			
ms	White	Hard	805	821			
ate-Shell	Grey	Soft	821	828			



Formation	Color	Hard or Soft	Top 4	Bottom	Oil, Gas or Water	Depth Found	Remarks
Red Rock	Red	Soft	983	1009			
Red Lime	Red	Soft	1009	1024			
Red Rock	Red	Soft	1024	1048			
Sandy Lime	White	Soft	1048	1063			
Slate-Shell	Grey	Soft	1063	1097			
Sandy Lime	White	Soft	1097	1125			
Red Rock	Red	Soft	1125	1165			
Slate-Shell	Grey	Soft	1165	1172			
Lime	White	Hard	1172	1183			
Red Rock	Red	Soft	1183	1234			
Slate-Shell	Grey	Soft	1234	1274			
Sand	White	Soft/Hard	1274	1309			
Slate-Shell	Grey	Soft	1309	1334			
Sand	White	Hard	1334	1354			
Slate-Shell	Grey	Soft	1354	1469			
Sand	White	Hard	1469	1527			
Slate-Shell	Grey	Soft	1527	1626			
Lime	White	Soft	1626	1632			
Slate-Shell	Grey	Soft	1632	1659			
Sand	White	Hard	1659	1717			
Slate	Grey	Soft	1717	1822			
Sand	White	Hard	1822	1823			
Slate	Grey	Soft	1823	1958			
Sand	White	Hard	1958	1976			
Slate	Grey	Soft	1976	1994			
Red Rock	Red	Soft	1994	2011			
Sand	White	Hard	2011	2027			
Slate	Grey	Soft	2027	2040			
Big Lime	White	Hard	2040	2149			
Sand <i>Big Inj</i>	White	Hard	2149	2221	Oil	2154-2166	Show
Slate-Shell	Grey	Soft	2221	2234	Gas	2166-2176	Show
					Oil-Gas	2176-2188	Show

Date September 12, 1907, 19

APPROVED N. O. Clark et al N. O. Clark, Owner

By \_\_\_\_\_ (Title)