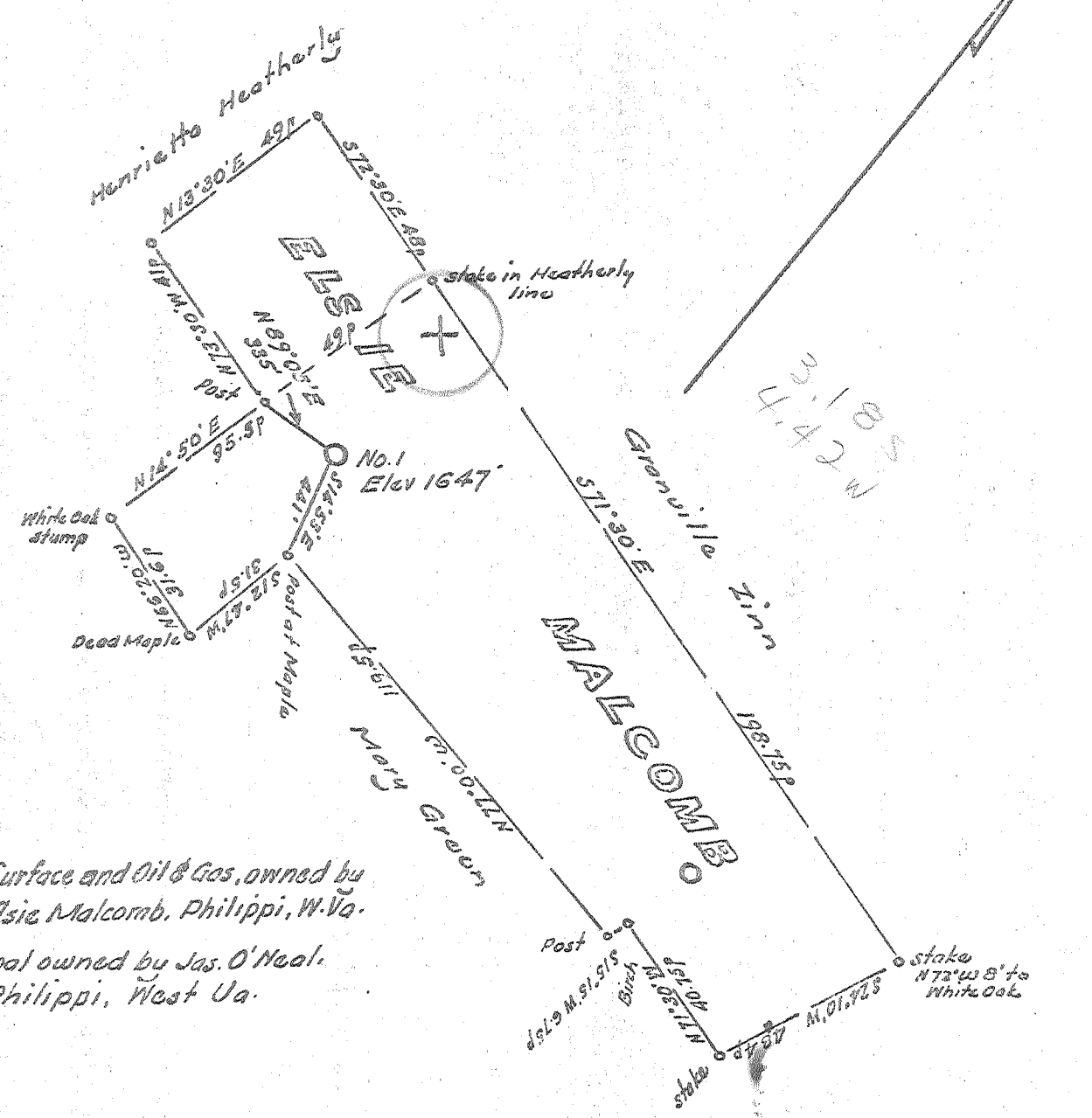


LATITUDE 39° 10'

LONGITUDE 80° 00'



Surface and Oil & Gas, owned by
Elsie Malcomb, Philippi, W. Va.
Coal owned by Jas. O'Neal,
Philippi, West Va.

Minimum Error of Closure 1 in 200'

Source of Elevation B.M. at Mt Vernon Church, Yarni SW 1575

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: *W. S. Barber*
Squares: N S E W

Map No.

Company Ray Brothers Corp.
 Address P.O. Box 51, Spencer, W. Va.
 Farm Elsie Malcomb
 Tract _____ Acres 77.5 + 1/4 Lease No. _____
 Well (Farm) No. BAR-290 Serial No. _____
 Elevation (Spirit Level) 1647
 Quadrangle Philippi EC
 County Barbour District Philippi
 Engineer W. S. Barber
 Engineer's Registration No. 1227
 File No. _____ Drawing No. _____
 Date July 29, 1969 Scale 1" = 400' = 660'

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

WELL LOCATION MAP
FILE NO. BAR-493

- + 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 WELLS DIVISION

Rotary
Spudder
Cable Tools
Storage c. none

Quadrangle Philippi
Bar 493

WELL RECORD

Oil or Gas Well Gas (KIND)

Company Ray Brothers Corp.
Address 630 Commerce Sq., Charleston, W. Va.
Farm Elsie Malcomb Acres 91.5
Location (waters) Elk Creek
Well No. BAR 240 Elev. 1647
District Philippi County Barbour
The surface of tract is owned in fee by Elsie Malcomb
Address Philippi, W. Va.
Mineral rights are owned by Elsie Malcomb
Address Philippi, W. Va.
Drilling commenced 10 9 69
Drilling completed 10 18 69
Date Shot From To

Casing and Tubing Size	Used in Drilling	Left in Well	Packers
16			Kind of Packer.....
13 3/8	20	20	Size of.....
10 8 5/8		802	Depth set.....
6 5/8			Perf. top <u>3640 42'</u>
5 3/16		4090	Perf. bottom <u>3668 70'</u>
4 1/2	Riley	4 holes	Perf. top <u>3718 20'</u>
3	Riley	4 holes	Perf. bottom <u>3692 66'</u>
2	Riley	5 holes	
Liners Used	Benson	13 holes	

Open Flow /10ths Water in Inch
/10ths Merc. in Inch
Volume Cu. Ft.
Rock Pressure lbs. hrs.
Oil bbls., 1st 24 hrs.

Attach copy of cementing record.
CASING CEMENTED 4 1/2 SIZE 4090 No. Ft. Date
Amount of cement used (bags) 200
Name of Service Co. Halliburton Cementing Co.
COAL WAS ENCOUNTERED AT FEET INCHES
FEET INCHES FEET INCHES
FEET INCHES FEET INCHES

WELL ACIDIZED (DETAILS)
WELL FRACTURED (DETAILS) Benson 300 Gals. acid, 56,000 # 20/40 sand, 1000 Bbls. water
Riley 500 gals. acid, 56,000 # 20/40 sand, 1000 Bbls. water.
RESULT AFTER TREATMENT (Initial open flow or bbls.) 300,000 cu. ft. 300 MCF GPD
ROCK PRESSURE AFTER TREATMENT 1280 HOURS 24
Fresh Water Feet
Producing Sand Riley and Benson Salt Water Feet
3640-3720 3962-66 Depth 3620-3730 and 3940-4010'

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Surface			0	14			Logged by Basin
Hard rock			14	55			8 5/8 cemented - Lawson
Sandy shale		Hard	55	410			4 1/2" cemented - Halliburton
Sand		Hard	410	890			7 7/8" hole
Sandy shale			890	1164			
Big lime			1164	1378			
Sand & shale			1378	3620			
Riley			3620	3730			
Shale & sand			3730	3940			
Benson			3940	4010			
Shale			4010	4107	TD		

RECEIVED
MAR 6 - 1970
OIL & GAS DIVISION
CFM