

STATE OF MARYLAND
DEPARTMENT OF GEOLOGY, MINES AND WATER RESOURCES

The Johns Hopkins University
BALTIMORE 18, MARYLAND

WELL COMPLETION REPORT

This report must be submitted within 30 days after completion of the well

WELL DESCRIPTION

WELL LOG

State the kind of formations penetrated, their depth, their thickness, and if water-bearing

CASING AND SCREEN RECORD

State the kind and size of casing, liner, shoe, screen, and other accessories (if no casing used, give diameter of well)

Permit Number Five (5)

Name of Owner
Columbian Carbon Co.

PUMPING TEST

Hours Pumped.....
Pumping Rate
Gallons per Minute.....

WATER LEVEL

Distance from land surface to water:
Before Pumping.....Ft.
When Pumping.....Ft.

APPEARANCE OF WATER

Clear.....
Cloudy.....
Taste.....
Odor.....

Height of Casing Above Land SurfaceFt.

PUMP

Type.....
Capacity
Gallons per Minute.....
Gallons per Hour.....
Pump Column Length.....Ft.

REMARKS

See reverse side for
hydraulic record

Well Was Completed
Date 10-1-54
Well Driller
Columbian Carbon Co
Signature

GW-1511, Ezra E. Hamstead #1
started drilling 6-23-54 -
completed drilling 9-23-54

FEET
from.....to.....

Log of Well

Cellar	0	-	8
Soil	8	-	13
Soapstone	13	-	85
Slate & Shells	85	-	2780
Brown Shale	2780	-	2809
Dark Shale	2809	-	2892
Slate & Shells	2892	-	3520
Black Shale	3520	-	3936
Lime	3936	-	3985
Black Shale	3985	-	4009
4008'DLM-4000'SLM			
4032'DLM-4024'SLM			
Chert	4001	LM-4090	
Dark Shale	4090	-	4123
Oriskany Sand	4123	-	4203
Lime	4203	-	4280
TOTAL DEPTH - - - - -			4280'

13-3/8" 40# D.P.

DIAM. (Inches)
FEET
An't run An't pull

13-3/8" 40# D.P.	33'2"	-
10-3/4" 10#	138'5"	138'5"
Ran with M.B.H. packer (pulled) at 139'DLM		
8-5/8" 21#	602'10"	-
Ran with M.B.H. Packer at 606'DLM		
7" 23# with guide	4030'1"	-
4009'DLM shoe ran at 4005'SLM		
4001'SLM		
2-3/8" ran with 2" cage for siphon string	4194'2"	
F. water 25'	hole full	
F. water 240'	hole full	
Gas 2861'	273M-exhausted	
S. water 2883'	1/2 blr/hr.	

Gas pays:
4024-29' 45/10 W. 2" 283MCF
4034-40' 48/10 W. 2" 292MCF
4053-58' 53/10 W. 2" 307MCF
4090-4100' 52/10 W. 2" 304MCF
4115-4123' 60/10 W. 2" 327MCF
4134-38' 62/10 W. 2" 332MCF
4160-66' 67/10 W. 2" 345MCF
4180-81' 67/10 W. 2" 345MCF
4181-84' 71/10 W. 2" 355MCF
4199-4203' 74/10 W. 2" 363MCF
4206-4210' 73/10 W. 2" 360MCF

State of Maryland
 DEPARTMENT OF GEOLOGY, MINES AND WATER RESOURCES
 The Johns Hopkins University
 Baltimore 18, Maryland

APPLICATION FOR PERMIT TO DRILL OIL OR GAS WELL
 (Applications must be submitted in triplicate)

OWNER <u>Cities Service Co. / Columbia Carbon Company</u> John 7/1/68 STREET xxxxxxx <u>P.O. Box 873</u> POST OFFICE <u>Charleston 23, W. Va.</u>	LOCATION OF WELL <u>GW-1511, Ezra E. Hamstead #1</u> COUNTY <u>Garrett</u> NEAREST POSTOFFICE <u>Redhouse</u> Distance from Post Office <u>13,000 feet</u> Direction from Post Office <u>Southwest</u>
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PERMIT TO DRILL WELL

NOT TO BE FILLED IN BY APPLICANT

PERMIT NO. Five (5)

The permit is herewith granted subject to the conditions stipulated.

James T. Squirey
 Director

Date July 6, 1954

Special conditions that may apply:

APPROXIMATE DEPTH OF WELL (feet) 5,500'
 METHOD OF DRILLING Cable Tool
 DEEPEST GEOLOGIC FORMATION
 WELL WILL BE DRILLED Helderberg
 DISTANCE OF WELL LOCATION
 TO NEAREST BUILDING (feet) 1,000 ft.

NUMBER OF SHIFTS PER DAY Two

LICENSED DRILLER IN CREW OF EACH SHIFT	
NAME	ADDRESS

Delbert Lawson	Rt. #2, Box 7, Oakland, Md.
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Harry L. Hoover	"
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Carl McClothlin, alt.	"
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These names may be supplied later but before drilling begins

The names and post office addresses of the owners of the tracts of land included on the plat or map accompanying the application are to be given below.

- Ezra E. Hamstead & Virginia F. Hamstead-717 Monongahela Bldg. Morgantown, W.Va.
- Jonas A. Hamstead, Agent, Kingwood, W. Va.
- Lester N. Bachtel & Jessie C. Bachtel, Route #2, Oakland, Maryland
- Lucy A. Griffith, Agent, Route #2, Oakland, Maryland
- Elmer C. Shaffer & Cora B. Shaffer, Route #2, Oakland, Maryland
- Percy L. Lawton & Martha Lawton, RFD #2, Oakland, Maryland
- David B. Reger, P.O. Box 816, Morgantown, W. Va.

NOTE

A BOND FOR \$2,500 PAYABLE TO THE STATE OF MARYLAND MUST ACCOMPANY THE APPLICATION
 THIS APPLICATION FORM MUST BE FILLED OUT WITH TYPEWRITER OR IN BLOCK LETTERS

WELL COMPLETION REPORT

Casing Record

7-1-54 - 8-5/8" casing ran with M.B.H. packer at 606'DIM

9-7-54 - 7" O.D. casing ran with Baker Guide shoe at 4005'SLM.

Circulated 227 sacks of Baroid and 60 sacks of gel to kill gas.
Pumped in 50 sacks cement to 38 1/2' and staged to 39 1/2' with maximum pressure of 1000#.

Hydrafrac Record

9-27-54 - set Model "K" drillable packer at bottom of pipe at 3995'.

9-28-54 - Hydrafraced with 6,000# sand at a maximum pressure of 3900#. Pumped in 35 bbls. oil to break down formation. Pumped in with one truck at 1000# - with 2 trucks at 2200#. Pumped in 3200 gallons of kerosene with 6,000# sand - pressure started in at 700# - built up to 3700# - broke down to 3400#. Finished pumping in at 3500#. Pumped in 40 bbls. oil with gel breaker in it and 75 bbls. flush. Pumped in at 2700# - pressure 1200# when shut in.

Before hydrafracing gas gauged 360,000 cu. ft- final open flow 1,597,000 cu. ft.

72 hour pressure before hydrafracing 1740#.

1 1/2 hour pressure after hydrafracing 1320#

24 hour pressure after hydrafracing 1435#

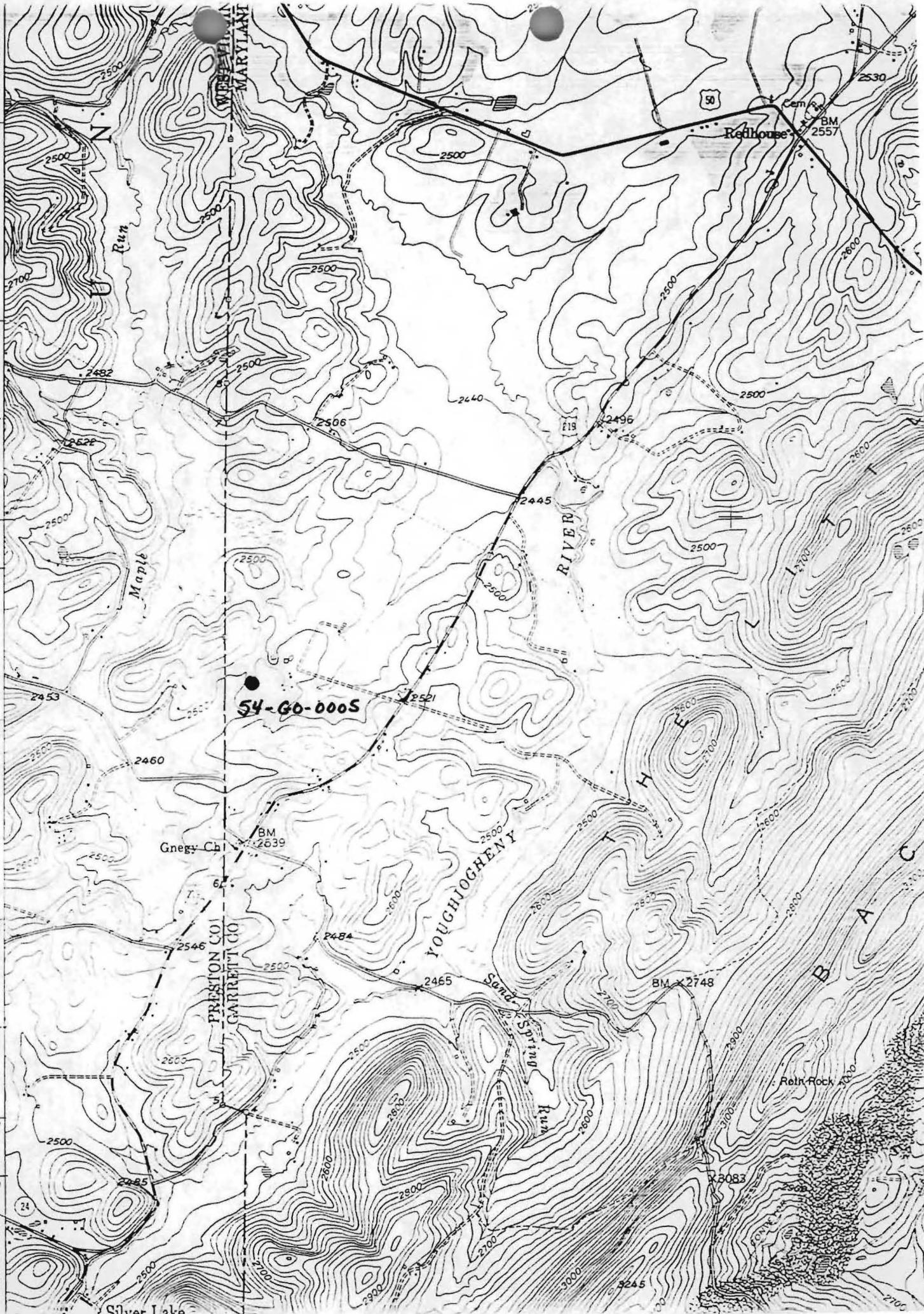
54-GO-0005 Jerome Moyer- Hamstead # 1

Tax Map 99 Parcel # 3



Table Rock Quad

5082 1 SE (AURORA)
4352
4351
17'30"
4349
4348
4347
530 000 FEET (MD.)
MI. TO U.S. 50 E GLOM 3.7 MI.



54-60-0005

Gnegy Ch
BM 2639

PRESTON COI
GARRETT CO

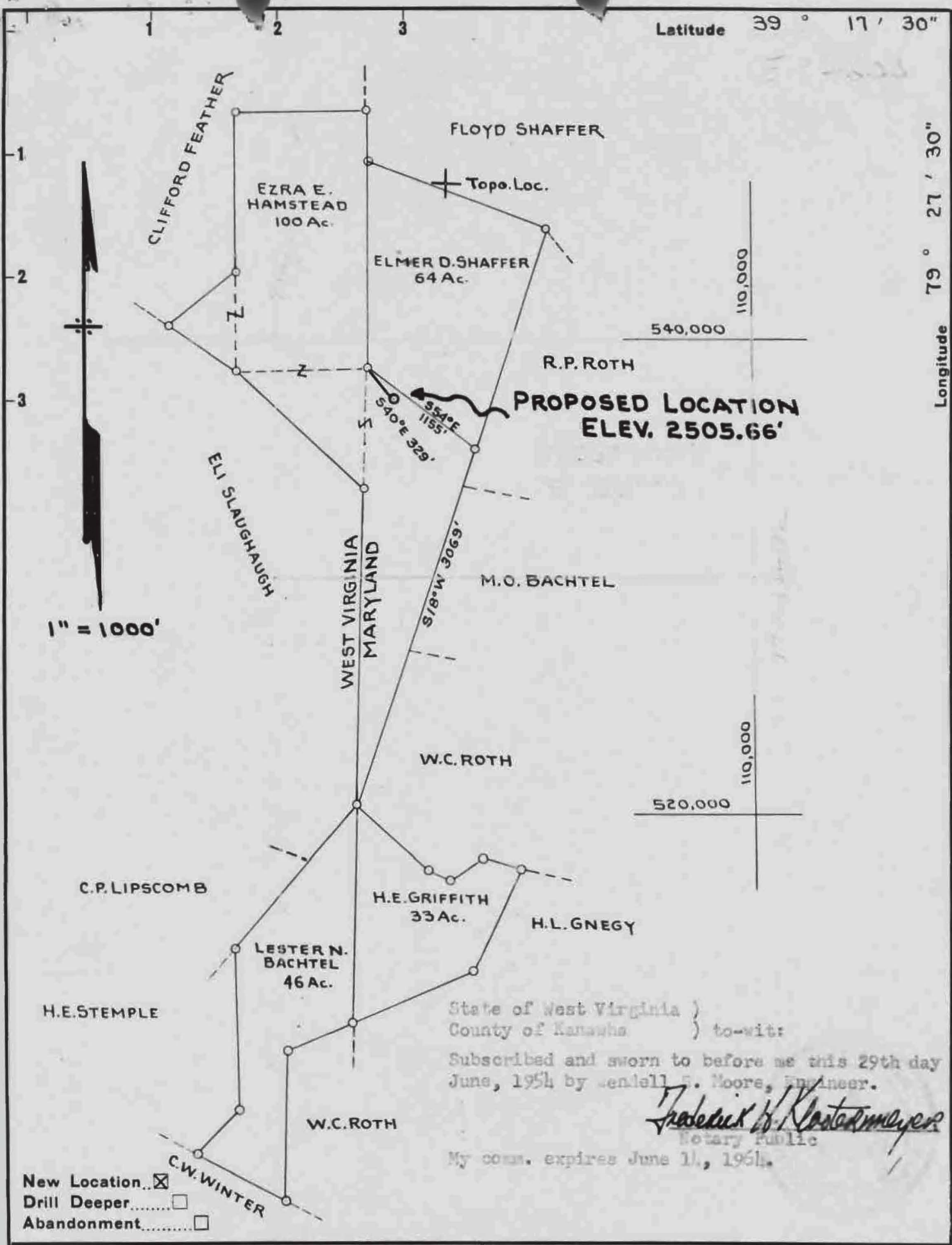
Redhouse

Table Rock

Silver Lake

Latitude 39 ° 17 ' 30"

Longitude 79 ° 27 ' 30"



1" = 1000'



1
2
3

- New Location...
- Drill Deeper.....
- Abandonment.....

**PROPOSED LOCATION
ELEV. 2505.66'**

Topo. Loc.

FLOYD SHAFFER

EZRA E.
HAMSTEAD
100 Ac.

ELMER D. SHAFFER
64 Ac.

R.P. ROTH

ELI SLAUGHAUGH

WEST VIRGINIA
MARYLAND

M.O. BACHTEL

W.C. ROTH

C.P. LIPSCOMB

H.E. GRIFFITH
33 Ac.

H.L. GNEGY

LESTER N.
BACHTEL
46 Ac.

H.E. STEMPLE

State of West Virginia)
County of Kanawha) to-wit:

Subscribed and sworn to before me this 29th day
June, 1954 by Wendell S. Moore, Engineer.

Frederick W. Kostermeier
Notary Public

My comm. expires June 11, 1964.

W.C. ROTH

C.W. WINTER

Company **COLUMBIAN CARBON COMPANY**

Address **BOX 813 CHARLESTON, W.VA.**

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