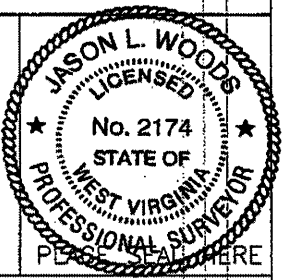


(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE No 10-100-023
 DRAWING No. 10-100-023
 SCALE 1"=500'
 MINIMUM DEGREE OF ACCURACY 1:200
 PROVEN SOURCE OF ELEVATION TRIMBLE PRO XH GPS UNIT

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DIVISION OF ENVIRONMENTAL PROTECTION.

(SIGNED) [Signature]
 JASON L. WOODS PS #2174



STATE OF WEST VIRGINIA
 DIVISION OF ENVIRONMENTAL PROTECTION
 OFFICE OF OIL AND GAS
 NITRO, WV

DATE JULY 27 20 10
 OPERATOR'S WELL No. 4386
 API WELL No. 47

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL STATE 47 COUNTY 103 PERMIT 00220W
 (IF "GAS") PRODUCTION STORAGE DEEP SHALLOW

LOCATION: ELEVATION 1110 WATER SHED LYNN CAMP
 DISTRICT PROCTOR COUNTY WETZEL
 QUADRANGLE WILEYVILLE

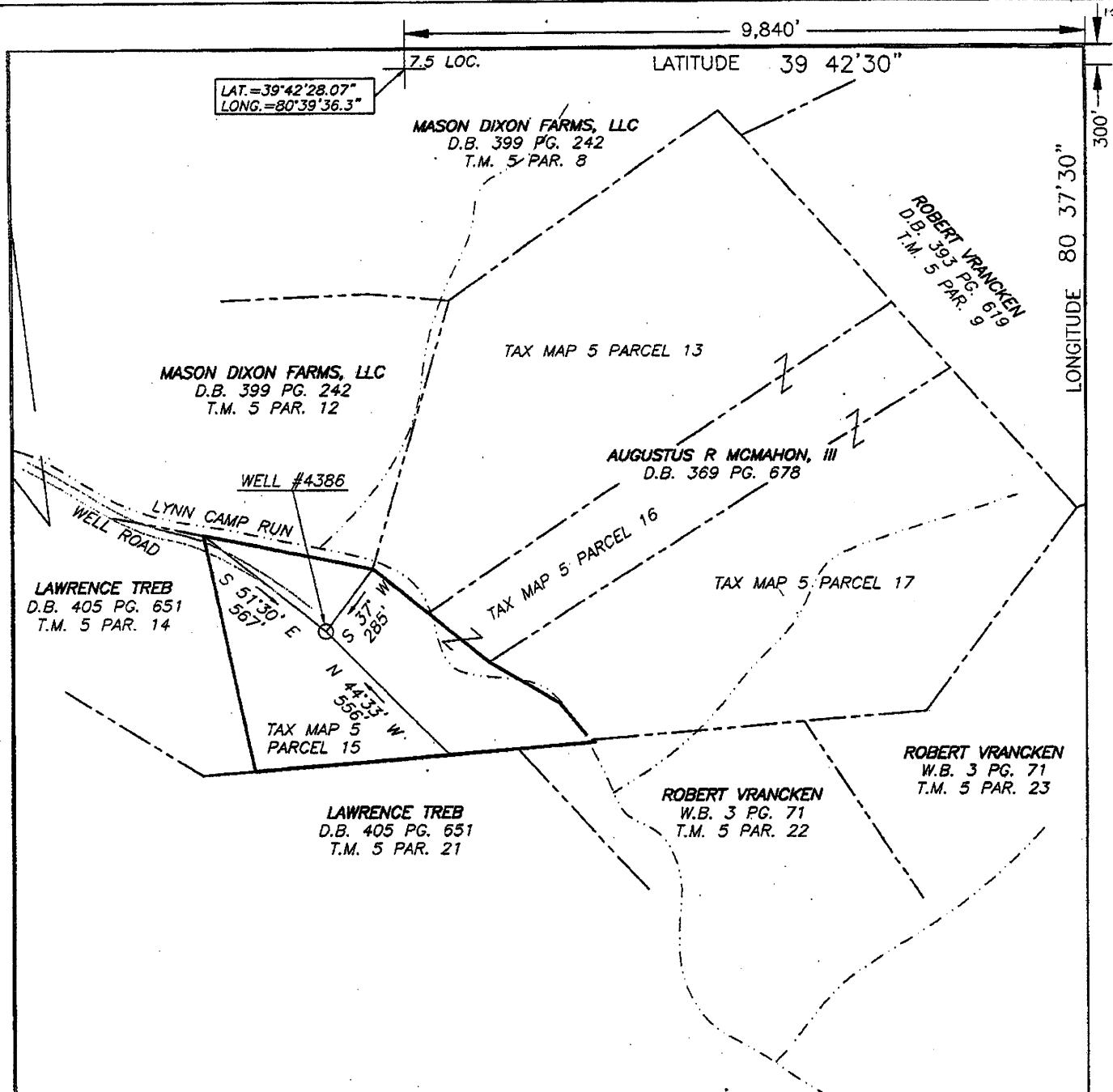
SURFACE OWNER AUGUSTUS MCMAHON, III ACREAGE 15
 OIL & GAS ROYALTY OWNER SADIE M. RUSH, ETAL LEASE ACREAGE 53
 LEASE No. 31954222

PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) ACID STIMULATE

PLUG AND ABANDON CLEAN OUT AND REPLUG

TARGET FORMATION MAXTON ESTIMATED DEPTH 1922
 WELL OPERATOR COLUMBIA GAS TRANSMISSION, LLC DESIGNATED AGENT PAUL AMICK
 ADDRESS PO BOX 1273, CHARLESTON, WV ADDRESS P.O. BOX 1273, CHARLESTON W.V.
25325-1273 25325-1273

FORM IV-6 (8-78)

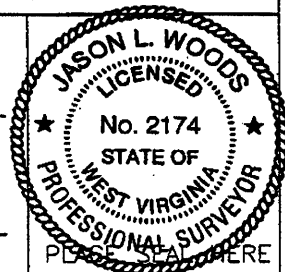


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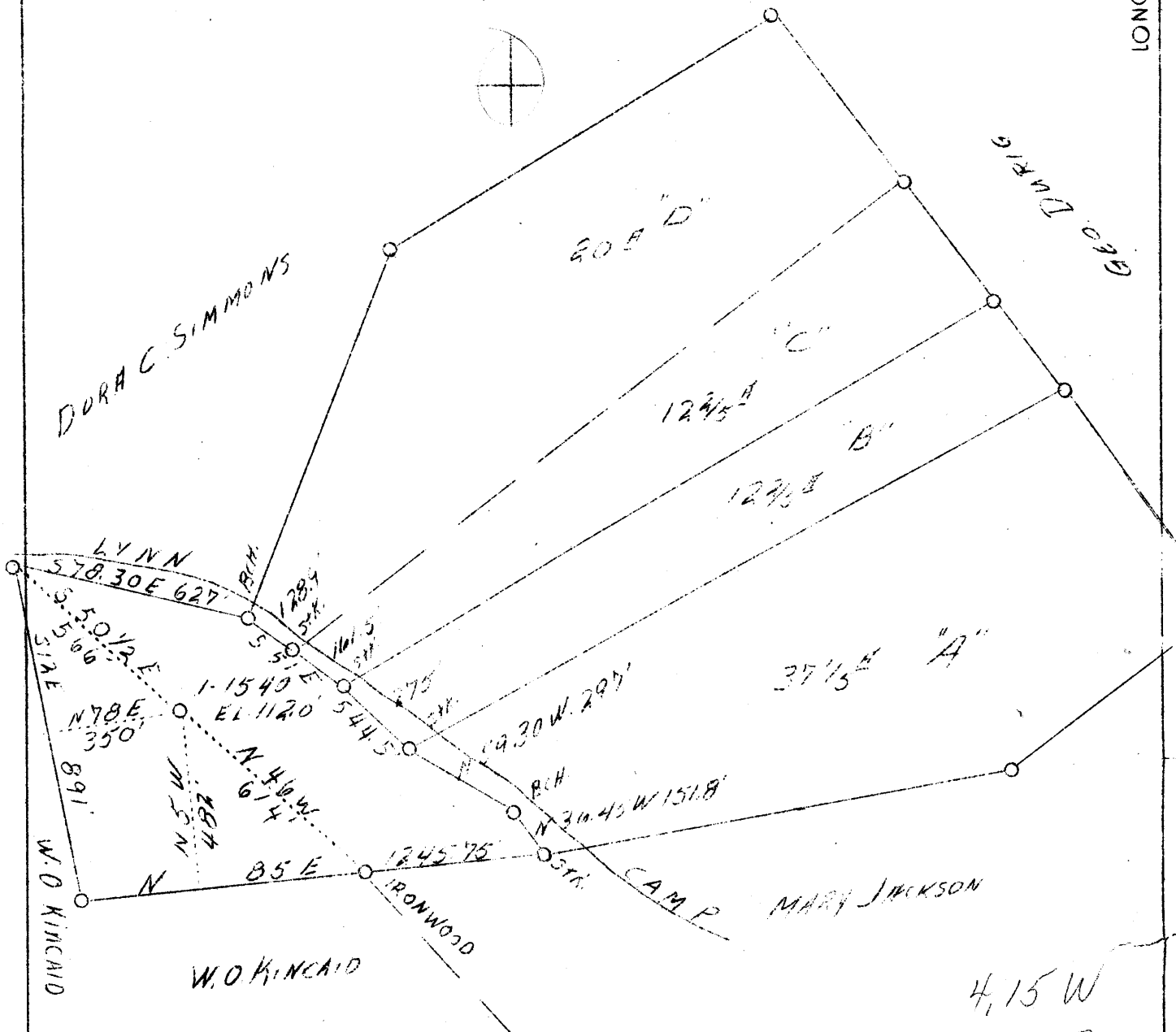
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25325-1273 25325-1273

FORM IV-6 (8-78)

LATITUDE 39° 45'

LONGITUDE 80° 35'



Company Carnegie Nat. Gas Co.
 Address Frick Bldg., Pgh. Pa.
 Farm Nancy J. Rush
 Tract "E"
 Acres 13
 Lease No. E-15035-77
 Well (Farm) No. One
 Serial No. 1540
 Elevation (SL) 1120
 Quadrangle Littleton N. W. 1/4
 County Wetzel
 District Proctor
 Engineer D. T. Britton
 Eng. Reg. No. -
 Date Feb. 14, 1939
 Scale 1" - 400'

STATE OF WEST VIRGINIA
 Department of Mines
 OIL & GAS DIVISION
 Charleston

WELL LOCATION MAP

File No. NET-220

x Denotes location of well on U. S. 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.

NANCY J. RUSH NO. 1 (1540) WELL.

Proctor District, Wetzel County, W. Va.

By Carnegie Natural Gas Company.

Located 4.15 mi. W. of 80° 35' and 2.9 mi. S. of 39° 45' - NC - Littleton Quadran.

Elevation, 1120' L.

Permit Wet-220.

Drilling commenced April 4, 1939; completed, May 1, 1939.

Gas well; volume, 1,015,000 cu. ft. per day.

10" casing, 30'; 8", 1647'; 6", 2253'.

Fresh water at 892'; salt water at 1690'.

Samples from 1395 to 1830' examined by J. H. C. Martens; the base of the Conemaugh and base of the Allegheny are not determined with any great certainty.

Martens' record from samples.

Top. Bottom. Thickness.

786 -	790	4	Sewickley Coal (from driller's record)
890 -	894	4	Pittsburgh Coal (from driller's record)
			CONEMAUGH FORMATION, 564 FEET
1395 -	1405	10	Sandstone, gray, very fine, shaly, micaceous
1405 -	1443	38	Sandstone, white, coarse; contains a little white clayey material
1443 -	1458	15	Shale and siltstone, dark-gray
			ALLEGHENY FORMATION, 220 FEET
1458 -	1472	14	Shale, dark-gray; also some brown limestone
1472 -	1485	13	Limestone, dark-brown
1485 -	1512	27	Shale, light-gray, silty
1512 -	1523	11	Sandstone, light-gray, very fine, 70%; gray to black shale.
1523 -	1536	13	Shale, gray, silty
1536 -	1546	12	Shale, black
1546 -	1612	66	Shale and siltstone, gray to dark-gray; contains siderite concretions
1612 -	1625	13	Sandstone, white, medium-grained
1625 -	1649	24	Shale, gray, silty; a little black shale and trace of coal
1649 -	1678	29	Shale, dark-gray, silty
			POTTSVILLE FORMATION, 216+ FEET
1678 -	1700	22	Sandstone, white, medium-grained; crystal faces on many of grains
1700 -	1724	24	Siltstone, dark-gray, shaly, micaceous
1724 -	1738	14	Shale, gray, silty
1738 -	1752	14	Shale, very light brown, with some gray; contains siderite spherulites
1752 -	1778	26	Sandstone, light-gray, medium-grained, micaceous, sideritic
1778 -	1790	12	Shale, nearly white, silty
1790 -	1802	12	Siltstone, dark-gray, shaly, micaceous
1802 -	1845	43	Shale, dark-gray to black
1845 -	1873	28	Siltstone, dark-gray, shaly
1873 -	1894	7	Sandstone, white, fine
			Total depth; gas at 1882-1893' in sand designated as Maxton in driller's record

WEST VIRGINIA DEPARTMENT OF MINES

OIL & GAS DIVISION

WELL RECORD

Permit No. Wet-220

Gas Well

Littleton Quad.

CASING & TUBING

Company Carnegie Natural Gas Co.
 Address Hundred, W. Va.
 Farm Nancy J. Rush ACRES 13
 Location Lynn Camp
 Well No. 1-1540 ELEV. 1120
 District Proctor - Wetzel County
 Surface C. R. Rush, 1/2 Texan C. Miller
 Endicott, W. Va.
 Mineral Nancy J. Rush, etal, Endicott, W.Va.
 Lydia Richmond Hrs. 1/2 Dr.O.L.Richmond
 Wheeling, W. Va.
 Drilling commenced 4/11/39 - Completed 5/1/39
 Open Flow 8-1/2/10ths Water in 3"
 Volume 1,015,000 c.f.
 Rock Pressure 110 lbs. 3 hrs.
 Water Fresh W 892 - Salt W 1690

10 30 254
 8-1/4 1647 1367
 6-5/8 2253 1873
 No packer
 Not cemented
 Coal @ 786 & 890 feet

Formation Color ^{Mar} TOP Base Result					Formation Color ^{Mar} TOP Base Result				
Clay	yel	s	0	15	Slate	blk	s	1260	1285
Lime	lgt	m	15	20	Little Dunk. wh	m	1285	1305	
Slate	lgt	s	20	85	Slate	drk	s	1305	1365
Sand	lgt	m	85	95	Dunkard lgt	h	1365	1395	
Slate	drk	s	95	125	Slate	lgt	s	1395	1405
Rock	red	s	125	150	Sand B.D lgt	m	1405	1445	
Slate	lgt	s	150	197	Slate	drk	s	1445	1480
Lime	lgt	m	197	220	Lime	wh	h	1480	1487
Slate	drk	s	220	240	Slate	lgt	s	1487	1545
Lime	wh	m	240	260	Slate-Shells	drk	s	1545	1612
Slate	lgt	s	260	320	Sand	lgt	m	1612	1630
Rock	red	s	320	337	Slate	drk	s	1630	1678
Slate	lgt	s	337	380	1st Salt S h&M	h&M	1678	1710	
Lime	wh	m	380	400	Slate	blk	s	1710	1768
Slate	wh	s	400	448	Sand wh	m	1768	1787	
Slate	blk	s	448	465	Slate	gr	s	1787	1795
Lime	wh	m	465	475	Lime	wh	h	1795	1812
Sand	wh	s	475	508	Slate	drk	s	1812	1855
Slate	drk	s	508	560	Lime rd drk	s	1855	1873	
Slate	wh	s	560	575	Maxton S lgt	lgt	1873	1894	
Lime	wh	m	575	608				Gas 1882-- 1893	
Slate	wh	s	608	650					
Lime	wh	h	650	690					
Slate	lgt	s	690	710					
Lime	wh	h	710	775					
Slate drk	s	s	775	786					
Coal	blk	s	786	790	Mapletown				
Lime	wh	h	790	840					
Slate	drk	s	840	890					
Coal	blk	s	890	894	Pgh.				
Lime	wh	m	894	900					
Slate-Shell	wh	s	900	930					
Lime	wh	h	930	940					
Rock	red	s	940	945					
Lime	wh	h	945	978					
Slate	lgt	s	978	1000					
Rock	red	s	1000	1012					
Lime	wh	m	1012	1030					
Rock	red	s	1030	1042					
Lime	wh	h	1042	1080					
Rock	red	s	1080	1090					
Slate	wh	s	1090	1145					
Lime	wh	h	1145	1155					
Slate	wh	s	1155	1195					
Lime	wh	h	1195	1225					
Slate	wh	s	1225	1230					
Lime	wh	h	1230	1260					

Little Dunkard
 Dunkard
 1458

SW 1690

1120
 890
 230