

Jamie
7/1/91

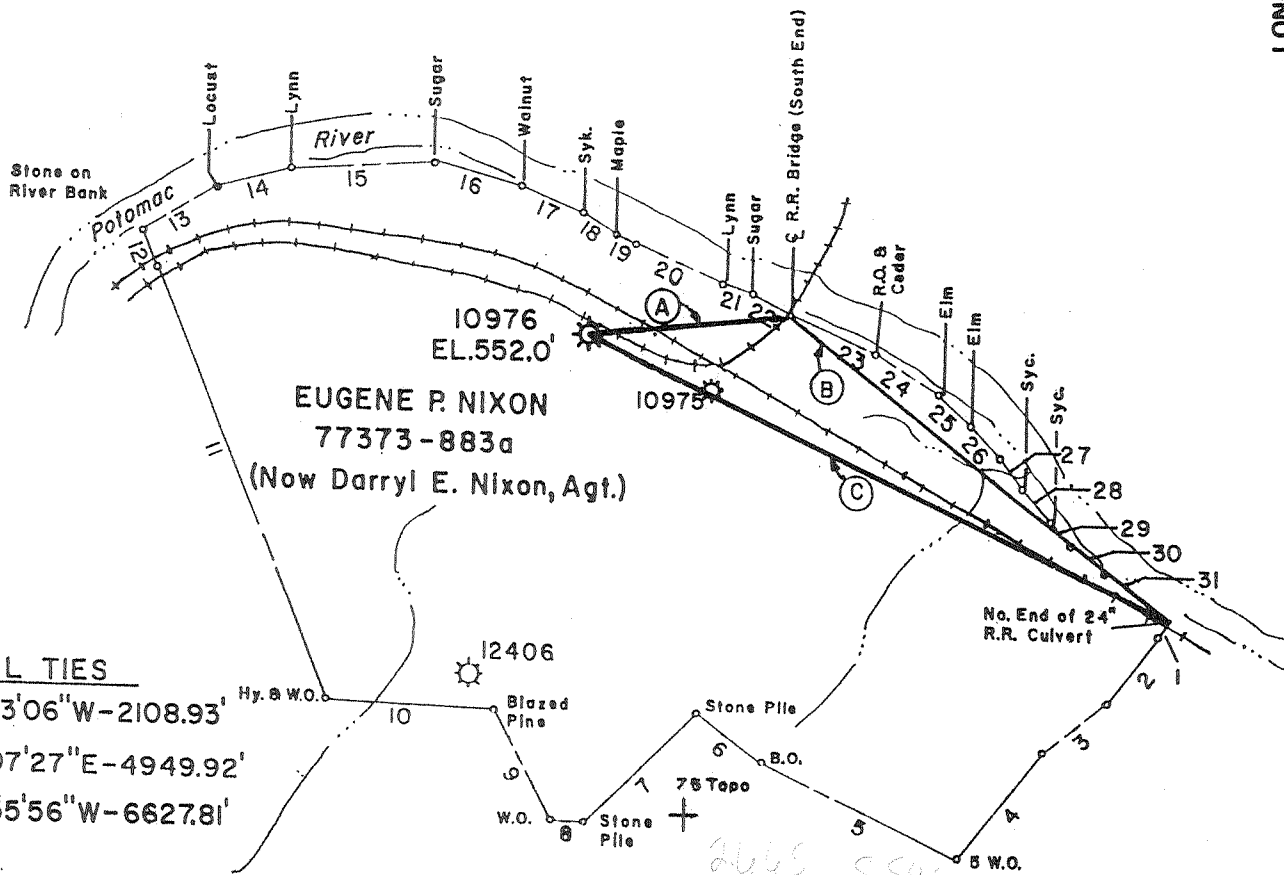
LATITUDE 39° 37' 30"

PROPERTY TIES

- | | | |
|--------------------|-------------------|--------------------|
| 1 S31°W-198' | 11 N22°W-4587' | 21 S70°E-363' |
| 2 S40°W-852' | 12 N24°W-412.5' | 22 S67°E-412.5' |
| 3 S50°W-808.5' | 13 N59°30'E-891' | 23 S63°E-948.75' |
| 4 S37°W-1452' | 14 N77°E-728.145' | 24 S56°30'E-759' |
| 5 N62°W-2277' | 15 N84°30'E-1485' | 25 S49°45'E-475.2' |
| 6 N48°W-825' | 16 S73°30'E-891' | 26 S45°30'E-504.9' |
| 7 S43°30'W-1650' | 17 S63°E-669.9' | 27 S34°E-252.45' |
| 8 N83°30'W-321.75' | 18 S66°E-327.9' | 28 S41°45'E-478.5' |
| 9 N24°W-1320' | 19 S57°30'E-198' | 29 S39°30'E-277.2' |
| 10 N87°W-1716' | 20 S65°E-990' | 30 S44°15'E-462' |
| | | 31 S70°E-693' |

LONGITUDE 78° 25' 00"

NORTH



WELL TIES

- (A) S82°43'06"W-2108.93'
- (B) S53°07'27"E-4949.92'
- (C) N65°55'56"W-6627.81'

MAP SHEET: 1601-S, S10 E11 FB.2434 PG. 5-7

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 2000'
 MINIMUM DEGREE OF ACCURACY 1' in 200'
 PROVEN SOURCE OF ELEVATION BM=U.S.G.S. BM MARKED S77 1941 EL.528 PAW PAW TOPO 7.5

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 DEPARTMENT OF MINES.

(SIGNED) *Robert E. Campbell*
 R.P.E. _____ L.L.S. 211

PLACE SEAL HERE

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION



DATE MAY 2, 19 91
 OPERATOR'S WELL NO. 10976
 API WELL NO. 47-005-00004P
 STATE COUNTY PERMIT

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW ___
 LOCATION: ELEVATION 552' WATER SHED POTOMAC RIVER
 DISTRICT CACAPON COUNTY MORGAN
 QUADRANGLE PAW PAW TOPO 7.5

SURFACE OWNER DOROTHY JORDAN, et al ACREAGE 22.6a
 OIL & GAS ROYALTY OWNER E.P. NIXON (Now DARRYL E. NIXON, Agt.) LEASE ACREAGE 883a
 LEASE NO. 77373

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

PLUG AND ABANDON X CLEAN OUT AND REPLUG ___

TARGET FORMATION _____ ESTIMATED DEPTH _____
 WELL OPERATOR CNG TRANS. CORP. DESIGNATED AGENT GLENN A. KNEPPER
 ADDRESS 445 WEST MAIN STREET ADDRESS 347 WEST MAIN STREET
CLARKSBURG, WEST VIRGINIA CLARKSBURG, WEST VIRGINIA

JUL 08 1991

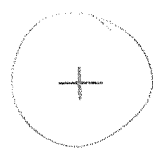
LATITUDE 39° 40'

LONGITUDE 78° 25'



COURSES & DISTANCES

1	S32°00'W	198.00'	2	S73°30'E	891.00'
2	S40°00'W	258.00'	3	S63°00'E	669.60'
3	S50°00'W	208.50'	4	S66°00'E	372.90'
4	S37°00'W	1462.00'	5	S57°30'E	198.00'
5	N62°00'W	2277.00'	6	S65°00'E	900.00'
6	N48°00'W	205.00'	7	S59°00'E	369.00'
7	S43°30'W	1650.00'	8	S67°00'E	412.50'
8	N83°30'W	321.75'	9	S63°00'E	948.75'
9	N24°00'W	1320.00'	10	S56°30'E	759.00'
10	N87°00'W	1716.00'	11	S48°45'E	475.20'
11	N28°00'W	4587.00'	12	S45°30'E	504.00'
12	N84°00'W	412.00'	13	S34°00'E	257.45'
13	N88°30'E	231.00'	14	S41°45'E	478.50'
14	N77°00'E	728.15'	15	S38°30'E	277.20'
15	N54°30'E	1485.00'	16	S44°15'E	462.00'
			17	S70°00'E	893.00'



5.68 S 1.15 W

Minimum Error of Closure $\frac{1}{15,000}$
 Source of Elevation *BM USGS 327* E.L. 570.21 Lat 38°35'00"
 Long. 78°26'00" Paw Paw Quadrangle
 "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."

New Location
 Drill Deeper
 Abandonment

Company *Joyce Pipe Line Co.*
 Address *Andover, New York*
 Farm *E.P. Nixon*
 Tract _____ Acres _____ Lease No. *10*
 Well (Farm) No. *M-2* Serial No. _____
 Elevation (Spirit Level) *553.6*
 Quadrangle *Paw Paw - WC*
 County *Morgan* District *Caecapon*
 Engineer _____
 Engineer's Registration No. _____
 File No. _____ Drawing No. _____
 Date *8-19-66* Scale *1" = 2000'*

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

WELL LOCATION MAP
 FILE NO. *MOR-4*

+ 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 5/100

Deep Well



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

Quadrangle Paw-Paw

Permit No. MOR-4

WELL RECORD

Oil or Gas Well Gas
(KIND)

Company Joyce Pipe Line Co.
Address Box B, Andover, N. Y. 14806
Farm Eugene Nixon Acres 883
Location (waters) Potomac River
Well No. M-2 Elev. 553
District Cacapon County Morgan
The surface of tract is owned in fee by Eugene Nixon
Address Oldtown, Md.
Mineral rights are owned by Same
Address _____
Drilling commenced 9-7-66
Drilling completed 5-20-67
Date Shot _____ From _____ To _____
With _____
Open Flow _____ /10ths Water in _____ Inch
_____ /10ths Merc. in _____ Inch
Volume 227,000 Cu. Ft.
Rock Pressure 1983 P.S.I. lbs. _____ hrs.
Oil _____ bbls., 1st 24 hrs.
WELL ACIDIZED _____

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
18 3/8"	26'	26'	
10 3/4"	704'	704'	Size of
8 1/4"			
7"	3526'	Pulled	Depth set
5 3/16"			
5 1/2"	4487'	4487'	Perf. top
2"			Perf. bottom
Liners Used			Perf. top
			Perf. bottom

CASING CEMENTED _____ SIZE _____ No. Ft. _____ Date _____

COAL WAS ENCOUNTERED AT None FEET _____ INCHES
_____ FEET _____ INCHES FEET _____ INCHES
_____ FEET _____ INCHES FEET _____ INCHES

WELL FRACTURED 30,000 Gal. Water Frac-18,900# 20-40 Sand
250# Walnut Hulls

RESULT AFTER TREATMENT 1,200,000 Cu. Ft.

ROCK PRESSURE AFTER TREATMENT 1983 P.S.I.

Fresh Water See Log Feet _____ Salt Water _____ Feet _____

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Light Gray Shale & Siltstone			0	390'	F. water	210'	
Sandstone & Siltstone Intbd.			390'	430'			
Med. & Light Gray Shale			430'	1733'			
Sandstone			1733'	1798'			
Siltstone, Dark Gray Shale			1798'	2036'			
Limestone, Sandy			2036'	2052'			
Med. & Light Gray Shale			2052'	4100'	Gas S. Water	2560' 3526'	Show
Black Shale - <u>Marcellus</u>			4100'	4320'			
<u>ONCNDAGA LS</u>			4320'	4350'			
Light Gray Shale - <u>Needmore</u>			4350'	4470'			
<u>ORISKANY SANDSTONE</u>			4470'	4672'	Gas	4540-70'	227,000 C. ^M
TOTAL DEPTH *****				4672'			

475



(over)

JUL 8 1968

ORISKANY DATA FROM MORGAN COUNTY GAS WELLS

Permit	Quad.	Oriskany	
		Top	Thickness
1.....	Stotlers.....	NOT DRILLED TO Do	
2.....	NOT DRILLED		
3.....	Paw Paw.....	-4167.....	146+
4.....	Paw Paw.....	-3983.....	164+
5.....	Stotlers.....	Below -5896....	Did not reach Do
6.....	Paw Paw.....	-5837.....	26.....Faulted
7.....	NOW PERMIT NO. 9		
8.....	Paw Paw.....	-5161.....	???.....Stopped in Do
9.....	Paw Paw.....	-4064.....	150