



Latitude 38° 30'

Longitude 81° 50'

38° 21'

|                             |                                    |
|-----------------------------|------------------------------------|
| Company                     | Hand & Smith                       |
| Address                     | Charleston, W. Va.                 |
| Farm                        | Nitro Industrial Corp.             |
| Tract                       | F & G Acres 101.84 Lease No. _____ |
| Well (Farm) No.             | NIC. 3 Serial No. 6                |
| Elevation (Spirit Level)    | 592                                |
| Quadrangle                  | St. Albans                         |
| County                      | Putnam District <i>Putnam</i>      |
| Engineer                    | E. G. Johnson <i>[Signature]</i>   |
| Engineer's Registration No. | 283                                |
| File No.                    | _____ Drawing No. _____            |
| Date                        | 7-2-36 Scale 1" = 600'             |

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

**WELL LOCATION MAP**  
 FILE NO. PUT-31

† 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.



WEST VIRGINIA DEPARTMENT OF MINES  
Oil and Gas Division

Permit No. Put-31

WELL RECORD

Gas Well

St. Albans Quad. - *NC*

Casing & Tubing

Company Hand & Smith  
 Address Charleston, W.Va.  
 Farm Nitro Industrial Corp. Acres 606.11  
 Location (waters) Kanawha River  
 Well No. NIC 3-H & S 6 *Elev. 592'*  
 District Poca County Putnam  
 Surface Nitro. Ind. Corp. Charleston  
 Mineral Nitro. Ind. Corp. Charleston  
 Commenced January 22, 1937  
 Completed May 25, 1937  
 Volume 80,000 cu. ft.

|         |      |      |
|---------|------|------|
| 8"      | 1468 | None |
| 5 3/16" | 1785 | 1785 |
| 10"     | 20'  |      |

Permit Issued 9-26-36

*5.03 S. 38° 30'*  
*0.87 W. 81° 50'*

*APD.*

*2 SE (J-4)*

*See Vol. VIII, p. 643*

| Formation Color     |       |     |      |        |                             | Formation Color |  |     |     |        |        |
|---------------------|-------|-----|------|--------|-----------------------------|-----------------|--|-----|-----|--------|--------|
|                     |       | Hor | Top  | Bottom | Result                      |                 |  | Hor | Top | Bottom | Result |
| Quick Sand          | Wh    | S   | 0    | 80     | F. Water                    |                 |  |     |     |        |        |
| Mud                 | Rod   | S   | 80   | 110    | 15'                         |                 |  |     |     |        |        |
| Mud                 | Blue  | S   | 110  | 140    |                             |                 |  |     |     |        |        |
| Sand                | Wh    | F   | 140  | 225    |                             |                 |  |     |     |        |        |
| Mud                 | Blue  | S   | 225  | 305    |                             |                 |  |     |     |        |        |
| Mud                 | Red   | S   | 305  | 325    |                             |                 |  |     |     |        |        |
| Slate               | Wh    | S   | 325  | 400    |                             |                 |  |     |     |        |        |
| Sand                | Wh    | F   | 400  | 430    |                             |                 |  |     |     |        |        |
| Slate               | Wh    | F   | 430  | 646    | Water                       |                 |  |     |     |        |        |
| Sand                | Wh    | F   | 646  | 740    | 540'                        |                 |  |     |     |        |        |
| Broken Sand & Slate | Wh    | F   | 740  | 802    |                             |                 |  |     |     |        |        |
| Sand                | Wh    | F   | 802  | 825    |                             |                 |  |     |     |        |        |
| Slate               | Wh    | F   | 825  | 840    |                             |                 |  |     |     |        |        |
| Sandy Lime          | Wh    | F   | 840  | 950    |                             |                 |  |     |     |        |        |
| Salt Sand           | Wh    | H   | 950  | 1396   | Gas                         |                 |  |     |     |        |        |
| Little Lime         | Bk.   | H   | 1396 | 1421   | 998'                        |                 |  |     |     |        |        |
| Big Lime            | Grey  | H   | 1421 | 1576   |                             |                 |  |     |     |        |        |
| Slate               | Grey  | S   | 1576 | 1601   |                             |                 |  |     |     |        |        |
| Big Injun           |       | F   | 1601 | 1645   | Water                       |                 |  |     |     |        |        |
| Slate & Shells      | Grey  | F   | 1645 | 2044   | 1604                        |                 |  |     |     |        |        |
| Shale               | Brown | F   | 2044 | 2060   |                             |                 |  |     |     |        |        |
| Berea               | Grey  | H   | 2060 | 2081   | Gas                         |                 |  |     |     |        |        |
| Slate & Shells      | Grey  | H   | 2081 | 2576   | 2071'                       |                 |  |     |     |        |        |
| Slate               | Wh    | F   | 2576 | 3191   |                             |                 |  |     |     |        |        |
| Slate & Shells      | Grey  | H   | 3191 | 3220   |                             |                 |  |     |     |        |        |
| Shale - L. H. V.    | Dark  | F   | 3220 | 3270   |                             |                 |  |     |     |        |        |
| Lime                | Dark  | H   | 3270 | 3330   |                             |                 |  |     |     |        |        |
| Shale               | Brown | F   | 3330 | 3670   |                             |                 |  |     |     |        |        |
| Slate <i>441</i>    | Wh    | F   | 3670 | 4050   | Gas                         |                 |  |     |     |        |        |
| Shale <i>818?</i>   | Brown | F   | 4050 | 4260   | 4108'                       |                 |  |     |     |        |        |
| Corniferous         | Dark  | H   | 4260 | 4334   | Gas                         |                 |  |     |     |        |        |
| Oriskany            | Dark  | H   | 4334 | 4336   | 4130'                       |                 |  |     |     |        |        |
| Corniferous         | Dark  | H   | 4336 | 4358   | <del>4358</del> <i>4358</i> |                 |  |     |     |        |        |
| TOTAL DEPTH         |       |     |      | 4358'  |                             |                 |  |     |     |        |        |

*4539*  
*3670*

*868 - expl. log*

*4260*  
*592*  
*3668*

*4334*  
*592*  
*3742*

*4358*

*4358*

*702007*