

Form



**pennsylvania**  
DEPARTMENT OF ENVIRONMENTAL  
PROTECTION

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL AND GAS MANAGEMENT

**Well Record**  
**(Unconventional Operators Only)**

| DEP USE ONLY        |                 |
|---------------------|-----------------|
| Site ID             | Client Id       |
| Primary Facility Id | Sub Facility Id |

| WELL INFORMATION                 |  |                                            |                            |                   |                                             |  |                                          |                       |                  |              |  |
|----------------------------------|--|--------------------------------------------|----------------------------|-------------------|---------------------------------------------|--|------------------------------------------|-----------------------|------------------|--------------|--|
| Well Operator<br>XTO ENERGY INC. |  |                                            | DEP ID#<br>265476          |                   | US Well No. (API No.)<br>37-019-22803-00-00 |  |                                          | Farm Name<br>Palton C |                  | Well #<br>5H |  |
| Address<br>190 Thorn Hill Road   |  |                                            | Latitude (DD)<br>40.894706 |                   | NAD 83                                      |  | Project Number                           |                       | Serial #         |              |  |
| City<br>Warrendale               |  |                                            | State<br>PA                |                   | Zip<br>15086                                |  | Municipality<br>Prospect Boro            |                       | County<br>Butler |              |  |
| Phone<br>724-772-3500            |  | Email<br>melissa_breitenbach@xtoenergy.com |                            | Borrow Pit<br>N/A |                                             |  | USGS 7.5 min. quadrangle map<br>Prospect |                       |                  | Section<br>8 |  |

Check the appropriate Submission: ☒ Original Well Record ☐ Amended Well Record

|                            |                                                                                                                                                                          |  |                                                                                                                                                                                          |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Well Type                  | <input checked="" type="checkbox"/> Gas                                                                                                                                  |  | Wellbore Conditioning:                                                                                                                                                                   |
| Well Orientation           | <input type="checkbox"/> Vertical <input checked="" type="checkbox"/> Deviated from Vertical (Top & Side views & Deviation Survey must be attached)                      |  | Surface Casing: Pumped 190 bbls H <sub>2</sub> O to break circulation and test lines, 50 bbls gel spacer, pump 5 bbls H <sub>2</sub> O to establish circulation prior to pumping cement. |
| Drill Method(s)            | <input checked="" type="checkbox"/> Rotary - Air 0-5,500' <input type="checkbox"/> Rotary - Mud ' <input type="checkbox"/> Cable Tool ' <input type="checkbox"/> Other ' |  | Intermediate Casing: Pump 200 bbls H <sub>2</sub> O to establish circulation prior to pumping cement.                                                                                    |
| Drilling Started 3/29/2019 | Surface Elev. 1,300ft.                                                                                                                                                   |  | GW Depth 70 ft.                                                                                                                                                                          |
| Drilling Complete N/A      | True Vertical Depth 4,652 ft.                                                                                                                                            |  | Depth of DFGW 400 ft.                                                                                                                                                                    |
| Date Well Completed N/A    | Total Measured Depth 5,500 ft.                                                                                                                                           |  | DFGW decided by: 5 Geologist Determination                                                                                                                                               |

| CEMENT                                     |                                                                     |                                                                                                            |  |
|--------------------------------------------|---------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|--|
| Cement returned on surface casing?         | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If No, provide depth to top of cement and method used to determine:                                        |  |
| Cement returned on coal protective casing? | <input type="checkbox"/> Yes <input type="checkbox"/> No            | If No, provide depth to top of cement and method used to determine: <input checked="" type="checkbox"/> NA |  |
| Cement returned on intermediate casing?    | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If No, provide depth to top of cement and method used to determine: <input type="checkbox"/> NA            |  |

| Casing String                        | Type/Class of Cement (Lead/Tail) | Slurry Temp F° | Amount of Cement (sks) (Lead/Tail/Total) | WOC hrs | Wt PPG | Yld ft <sup>3</sup> /sk | Gas Migration Controls Used                                                                                                            |
|--------------------------------------|----------------------------------|----------------|------------------------------------------|---------|--------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Conductor                            | Concrete /                       | 60 °           | 90 / / 90                                | 8       |        |                         | What controls were used if any (additives/ hardware. Specify type and depth applicable).<br><br>Intermediate: 0.4% fluid loss additive |
| Surface                              | / Class A                        | 70 °           | / 475 / 475                              | 8       | 15.60  | 1.22                    |                                                                                                                                        |
| Intermediate                         | Class A /                        | 70 °           | 650 / / 650                              | 8       | 15.60  | 1.21                    |                                                                                                                                        |
| Production                           | /                                |                | / /                                      |         |        |                         |                                                                                                                                        |
| If additional strings attach form(s) |                                  |                | Total 1,125                              |         |        |                         |                                                                                                                                        |

| CASING AND TUBING |           |           |                            |                           |                      |    |   |                                                                |        |                |           |
|-------------------|-----------|-----------|----------------------------|---------------------------|----------------------|----|---|----------------------------------------------------------------|--------|----------------|-----------|
| Hole Size         | Pipe Size | Wt. #/ft. | Grade Casing / Tubing Type | Thread / Weld - New/ Used | Amount in Well (ft.) | CO | R | Hardware - Baskets / Packer / Centralizers (Total/String) Type | Size   | Depth          | Date Run  |
| 24                | 24        | 95        | A-252                      | W - N                     | 40                   | TR | N |                                                                | 24     | 40             | 3/16/2019 |
| 17 1/4            | 13 3/8    | 48        | H-40                       | T - N                     | 545                  | CA | Y | 5 Centralizers F Shoe                                          | 13 3/8 | 27-504 545     | 3/29/2019 |
| 12 3/8            | 9 5/8     | 36        | J55                        | T - N                     | 1,885                | CA | Y | 15 Centralizers F Shoe                                         | 9 5/8  | 91-1,842 1,885 | 4/1/2019  |

If any casing is welded, provide the name(s) of the welder(s): Ryan McCulley, Lightning Energy

| PLUG-BACK/WELLBORE ALTERATION |       |    |      |                 |        |      |
|-------------------------------|-------|----|------|-----------------|--------|------|
| Fill Material & Plugs         | Depth |    | Date | Casing & Tubing |        |      |
|                               | From  | To |      | Size            | Pulled | Left |
|                               |       |    |      |                 |        |      |
|                               |       |    |      |                 |        |      |
|                               |       |    |      |                 |        |      |
|                               |       |    |      |                 |        |      |

# LOG OF FORMATIONS

US Well No. (API No.): 37-019-22803-00-00

(If you will need more space than this page, please photocopy the blank form before filling it in.)

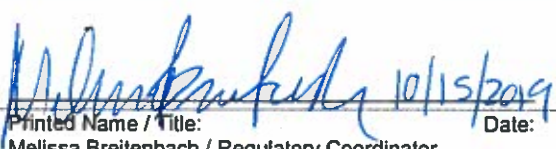
| Formation Name<br>or Lithology | Top<br>(feet) | Bottom<br>(feet) | Gas at<br>(feet) | Oil at<br>(feet) | Water at<br>(fresh / brine; ft.) | Source of Data |
|--------------------------------|---------------|------------------|------------------|------------------|----------------------------------|----------------|
| Cellar                         | 0             | 8                |                  |                  |                                  | Drillers Log   |
| Shale                          | 8             | 14               |                  |                  |                                  | Drillers Log   |
| Sandstone                      | 14            | 20               |                  |                  |                                  | Drillers Log   |
| Limestone                      | 20            | 27               |                  |                  |                                  | Drillers Log   |
| Sandstone                      | 27            | 37               |                  |                  |                                  | Drillers Log   |
| Limestone                      | 37            | 40               |                  |                  |                                  | Drillers Log   |
| Shale                          | 40            | 260              |                  |                  | FW 70                            | Drillers Log   |
| Sandstone                      | 260           | 350              |                  |                  |                                  | Drillers Log   |
| Sandy Shale                    | 350           | 420              |                  |                  | FW 400                           | Drillers Log   |
| Sandstone                      | 420           | 516              |                  |                  |                                  | Drillers Log   |
| Sandy Shale                    | 516           | 565              |                  |                  |                                  | Drillers Log   |
| Sandstone                      | 565           | 610              |                  |                  |                                  | Drillers Log   |
| Sandy Shale                    | 610           | 705              |                  |                  |                                  | Drillers Log   |
| Shale                          | 705           | 800              |                  |                  |                                  | Drillers Log   |
| Sandy Shale                    | 800           | 863              |                  |                  |                                  | Drillers Log   |
| Shale                          | 863           | 1116             |                  |                  |                                  | Drillers Log   |
| Sandy Shale                    | 1116          | 1211             |                  |                  |                                  | Drillers Log   |
| Sandstone                      | 1211          | 1250             |                  |                  |                                  | Drillers Log   |
| Sandy Shale                    | 1250          | 1385             |                  |                  |                                  | Drillers Log   |
| Sandstone                      | 1385          | 1440             | 1420             | 1420             |                                  | Drillers Log   |
| Sandy Shale                    | 1440          | 1510             |                  |                  |                                  | Drillers Log   |
| Sandstone                      | 1510          | 1540             |                  |                  |                                  | Drillers Log   |
| Sandstone/White                | 1540          | 1573             |                  |                  |                                  | Drillers Log   |
| Sandy Shale                    | 1573          | 1667             |                  |                  |                                  | Drillers Log   |
| Shale                          | 1667          | 2650             |                  |                  |                                  | Drillers Log   |
| Sandy Shale                    | 2650          | 2700             |                  |                  |                                  | Drillers Log   |
| Shale                          | 2700          | 2810             |                  |                  |                                  | Drillers Log   |

If no show of oil, gas or water, explain why:

## WELL SERVICE COMPANIES (Provide the name, address, and telephone number of all well service companies involved.)

| Casing Source                          | Cementing Company                           | Hardware Supplier                      | Logging Company    |
|----------------------------------------|---------------------------------------------|----------------------------------------|--------------------|
| Name<br>Ken Miller Supply, Inc.        | Name<br>C&J Energy                          | Name<br>Ken Miller Supply, Inc.        | Name<br>N/A        |
| Address<br>5484 Route 286 Hwy East     | Address<br>380 Southpointe Blvd., Suite 210 | Address<br>5484 Route 286 Hwy East     | Address            |
| City - State - Zip<br>Indiana PA 15701 | City - State - Zip<br>Canonsburg PA 15317   | City - State - Zip<br>Indiana PA 15701 | City - State - Zip |
| Phone<br>724-465-8875                  | Phone<br>724-541-1018                       | Phone<br>724-465-8875                  | Phone              |

I do hereby certify to the best of my knowledge, information and belief that the well identified on this Well Record has been properly cased and cemented in accordance with the requirements of 25 Pa. Code Chapter 78a and any conditions contained in the permit for this well. In addition, I do hereby certify that any casing which is attached to a blow-out preventer with a pressure rating greater than 3,000 psi has passed a pressure test in accordance with 25 Pa. Code §78a.84(f). I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

| Driller                                        | Well Operator's Signature                                                                                                                                     | DEP USE ONLY |
|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| Name<br>Appalachian Drillers                   | <br>Printed Name / Title:<br>Melissa Breitenbach / Regulatory Coordinator | Reviewed by: |
| R/g<br>1                                       |                                                                                                                                                               |              |
| Address<br>409 Butler Road, Suite A            |                                                                                                                                                               |              |
| City - State - Zip<br>Kittanning PA 16201-4403 |                                                                                                                                                               | Comments:    |
| Phone<br>(814) 341-9425                        | Date:<br>10/15/2019                                                                                                                                           |              |

# LOG OF FORMATIONS

US Well No. (API No.): 37-019-22803-00-00

(If you will need more space than this page, please photocopy the blank form before filling it in.)

| Formation Name<br>or Lithology | Top<br>(feet) | Bottom<br>(feet) | Gas at<br>(feet) | Oil at<br>(feet) | Water at<br>(fresh / brine; ft.) | Source of Data |
|--------------------------------|---------------|------------------|------------------|------------------|----------------------------------|----------------|
| Sandy Shale                    | 2810          | 2900             |                  |                  |                                  | Drillers Log   |
| Shale                          | 2900          | 2980             |                  |                  |                                  | Drillers Log   |
| Sand                           | 2980          | 2905             |                  |                  |                                  | Drillers Log   |
| Shale                          | 2905          | 3180             |                  |                  |                                  | Drillers Log   |
| Sandy Shale                    | 3180          | 3800             |                  |                  |                                  | Drillers Log   |
| Sandy Shale                    | 3800          | 3900             |                  |                  |                                  | Drillers Log   |
| Shale                          | 3900          | 4950             |                  |                  |                                  | Drillers Log   |
| Sandy Shale                    | 4950          | 5150             |                  |                  |                                  | Drillers Log   |
| Shale                          | 5150          |                  |                  |                  |                                  | Drillers Log   |

If no show of oil, gas or water, explain why:

**WELL SERVICE COMPANIES** (Provide the name, address, and telephone number of all well service companies involved.)

| Casing Source                          | Cementing Company                           | Hardware Supplier                      | Logging Company    |
|----------------------------------------|---------------------------------------------|----------------------------------------|--------------------|
| Name<br>Ken Miller Supply, Inc.        | Name<br>C&J Energy                          | Name<br>Ken Miller Supply, Inc.        | Name<br>N/A        |
| Address<br>5484 Route 286 Hwy East     | Address<br>380 Southpointe Blvd., Suite 210 | Address<br>5484 Route 286 Hwy East     | Address            |
| City - State - Zip<br>Indiana PA 15701 | City - State - Zip<br>Canonsburg PA 15317   | City - State - Zip<br>Indiana PA 15701 | City - State - Zip |
| Phone<br>724-465-8875                  | Phone<br>724-541-1018                       | Phone<br>724-465-8875                  | Phone              |

I do hereby certify to the best of my knowledge, information and belief that the well identified on this Well Record has been properly cased and cemented in accordance with the requirements of 25 Pa. Code Chapter 78a and any conditions contained in the permit for this well. In addition, I do hereby certify that any casing which is attached to a blow-out preventer with a pressure rating greater than 3,000 psi has passed a pressure test in accordance with 25 Pa. Code §78a.84(f). I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

| Driller                                        | Well Operator's Signature                                                                                                                                                      | DEP USE ONLY |
|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| Name<br>Appalachian Drillers                   | <br>Printed Name / Title: Melissa Breitenbach / Regulatory Coordinator<br>Date: 10/15/2019 | Reviewed by: |
| Rig<br>1                                       |                                                                                                                                                                                |              |
| Address<br>409 Butler Road, Suite A            |                                                                                                                                                                                |              |
| City - State - Zip<br>Kittanning PA 16201-4403 |                                                                                                                                                                                | Comments:    |
| Phone<br>(814) 341-9425                        |                                                                                                                                                                                |              |

# **XTO Energy**

Coretsky/Patton, Butler County, PA  
Coretsky/Patton  
Patton C5H  
C5H

Design: C5H

## **Javins Corporation Survey Report**

16 October, 2019



**Javins Corporation**  
Javins Corporation Survey Report



|                  |                                    |                                     |                                        |
|------------------|------------------------------------|-------------------------------------|----------------------------------------|
| <b>Company:</b>  | XTO Energy                         | <b>Local Co-ordinate Reference:</b> | Well Patton C5H                        |
| <b>Project:</b>  | Coretsky/Patton, Butler County, PA | <b>TVD Reference:</b>               | WELL @ 1300.0usft (Original Well Elev) |
| <b>Site:</b>     | Coretsky/Patton                    | <b>MD Reference:</b>                | WELL @ 1300.0usft (Original Well Elev) |
| <b>Well:</b>     | Patton C5H                         | <b>North Reference:</b>             | True                                   |
| <b>Wellbore:</b> | C5H                                | <b>Survey Calculation Method:</b>   | Minimum Curvature                      |
| <b>Design:</b>   | C5H                                | <b>Database:</b>                    | EDM 5000.1 Single User Db              |

|                    |                                                      |                      |              |
|--------------------|------------------------------------------------------|----------------------|--------------|
| <b>Project</b>     | Coretsky/Patton, Butler County, PA, Butler County PA |                      |              |
| <b>Map System:</b> | US State Plane 1927 (Exact solution)                 | <b>System Datum:</b> | Ground Level |
| <b>Geo Datum:</b>  | NAD 1927 (NADCON CONUS)                              |                      |              |
| <b>Map Zone:</b>   | Pennsylvania South 3702                              |                      |              |

|                              |                 |                          |                   |
|------------------------------|-----------------|--------------------------|-------------------|
| <b>Site</b>                  | Coretsky/Patton |                          |                   |
| <b>Site Position:</b>        |                 | <b>Northing:</b>         | 577,069.18 usft   |
| <b>From:</b>                 | Lat/Long        | <b>Easting:</b>          | 1,363,350.73 usft |
| <b>Position Uncertainty:</b> | 0.0 usft        | <b>Slot Radius:</b>      | 13-3/16 "         |
|                              |                 | <b>Latitude:</b>         | 40° 53' 40.700 N  |
|                              |                 | <b>Longitude:</b>        | 80° 3' 10.730 W   |
|                              |                 | <b>Grid Convergence:</b> | -1.49 °           |

| Well                 |       | Patton C5H |                     |                   |               |                  |
|----------------------|-------|------------|---------------------|-------------------|---------------|------------------|
| Well Position        | +N/-S | 0.0 usft   | Northing:           | 577,069.92 usft   | Latitude:     | 40° 53' 40.710 N |
|                      | +E/-W | 0.0 usft   | Easting:            | 1,363,360.74 usft | Longitude:    | 80° 3' 10.600 W  |
| Position Uncertainty |       | 0.0 usft   | Wellhead Elevation: | usft              | Ground Level: | 1,300.0 usft     |

|                  |                   |                    |                        |                      |                            |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| <b>Wellbore</b>  | C5H               |                    |                        |                      |                            |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination (°)</b> | <b>Dip Angle (°)</b> | <b>Field Strength (nT)</b> |
|                  | IGRF200510        | 12/31/2009         | -9.19                  | 68.40                | 53,497                     |

|                          |                                |                     |                     |                          |
|--------------------------|--------------------------------|---------------------|---------------------|--------------------------|
| <b>Design</b>            | C5H                            |                     |                     |                          |
| <b>Audit Notes:</b>      |                                |                     |                     |                          |
| <b>Version:</b>          | 1.0                            | <b>Phase:</b>       | ACTUAL              | <b>Tie On Depth:</b> 0.0 |
| <b>Vertical Section:</b> | <b>Depth From (TVD) (usft)</b> | <b>+N/-S (usft)</b> | <b>+E/-W (usft)</b> | <b>Direction (°)</b>     |
|                          | 0.0                            | 0.0                 | 0.0                 | 144.37                   |

**Javins Corporation**  
Javins Corporation Survey Report



|                  |                                    |                                     |                                        |
|------------------|------------------------------------|-------------------------------------|----------------------------------------|
| <b>Company:</b>  | XTO Energy                         | <b>Local Co-ordinate Reference:</b> | Well Patton C5H                        |
| <b>Project:</b>  | Coretsky/Patton, Butler County, PA | <b>TVD Reference:</b>               | WELL @ 1300.0usft (Original Well Elev) |
| <b>Site:</b>     | Coretsky/Patton                    | <b>MD Reference:</b>                | WELL @ 1300.0usft (Original Well Elev) |
| <b>Well:</b>     | Patton C5H                         | <b>North Reference:</b>             | True                                   |
| <b>Wellbore:</b> | C5H                                | <b>Survey Calculation Method:</b>   | Minimum Curvature                      |
| <b>Design:</b>   | C5H                                | <b>Database:</b>                    | EDM 5000.1 Single User Db              |

| Survey Program |           | Date 4/4/2019      |             |                                     |
|----------------|-----------|--------------------|-------------|-------------------------------------|
| From (usft)    | To (usft) | Survey (Wellbore)  | Tool Name   | Description                         |
| 50.0           | 1,825.0   | Gyro Surveys (C5H) | Javins Gyro | Surface Read Out Inertial Gyroscope |
| 1,946.0        | 5,438.0   | MWD Surveys (C5H)  | MWD         | OWSG MWD - Standard                 |

| Survey    |         |                   |           |            |            |            |               |                         |                     |                  |  |
|-----------|---------|-------------------|-----------|------------|------------|------------|---------------|-------------------------|---------------------|------------------|--|
| MD (usft) | Inc (°) | Azi (azimuth) (°) | CL (usft) | TVD (usft) | N/S (usft) | E/W (usft) | V. Sec (usft) | Closure Distance (usft) | Closure Azimuth (°) | DLeg (°/100usft) |  |
| 0.0       | 0.00    | 0.00              | 0.0       | 0.0        | 0.0        | 0.0        | 0.0           | 0.0                     | 0.00                | 0.00             |  |
| 50.0      | 0.39    | 12.70             | 50.0      | 50.0       | 0.2        | 0.0        | -0.1          | 0.2                     | 12.70               | 0.78             |  |
| 100.0     | 0.32    | 26.00             | 50.0      | 100.0      | 0.5        | 0.1        | -0.3          | 0.5                     | 16.56               | 0.22             |  |
| 150.0     | 0.26    | 41.60             | 50.0      | 150.0      | 0.7        | 0.3        | -0.4          | 0.7                     | 22.20               | 0.20             |  |
| 200.0     | 0.29    | 24.80             | 50.0      | 200.0      | 0.9        | 0.4        | -0.5          | 1.0                     | 24.81               | 0.17             |  |
| 250.0     | 0.33    | 27.90             | 50.0      | 250.0      | 1.1        | 0.5        | -0.6          | 1.2                     | 25.17               | 0.09             |  |
| 300.0     | 0.39    | 26.60             | 50.0      | 300.0      | 1.4        | 0.7        | -0.7          | 1.5                     | 25.58               | 0.12             |  |
| 350.0     | 0.36    | 11.20             | 50.0      | 350.0      | 1.7        | 0.8        | -0.9          | 1.9                     | 24.47               | 0.21             |  |
| 400.0     | 0.39    | 359.90            | 50.0      | 400.0      | 2.0        | 0.8        | -1.2          | 2.2                     | 21.66               | 0.16             |  |
| 450.0     | 0.30    | 354.50            | 50.0      | 450.0      | 2.3        | 0.8        | -1.4          | 2.5                     | 18.78               | 0.19             |  |
| 500.0     | 0.31    | 11.80             | 50.0      | 500.0      | 2.6        | 0.8        | -1.6          | 2.7                     | 17.29               | 0.18             |  |
| 550.0     | 0.17    | 134.50            | 50.0      | 550.0      | 2.7        | 0.9        | -1.6          | 2.8                     | 18.38               | 0.85             |  |
| 600.0     | 0.17    | 132.70            | 50.0      | 600.0      | 2.6        | 1.0        | -1.5          | 2.7                     | 21.18               | 0.01             |  |
| 650.0     | 0.17    | 153.20            | 50.0      | 650.0      | 2.4        | 1.1        | -1.4          | 2.7                     | 23.84               | 0.12             |  |
| 700.0     | 0.25    | 162.90            | 50.0      | 700.0      | 2.3        | 1.1        | -1.2          | 2.5                     | 26.74               | 0.17             |  |
| 750.0     | 0.28    | 145.90            | 50.0      | 750.0      | 2.1        | 1.2        | -1.0          | 2.4                     | 31.07               | 0.17             |  |
| 800.0     | 0.28    | 158.70            | 50.0      | 800.0      | 1.9        | 1.4        | -0.7          | 2.3                     | 36.25               | 0.12             |  |
| 850.0     | 0.14    | 168.60            | 50.0      | 850.0      | 1.7        | 1.4        | -0.5          | 2.2                     | 40.12               | 0.29             |  |
| 900.0     | 0.17    | 137.10            | 50.0      | 900.0      | 1.6        | 1.5        | -0.4          | 2.2                     | 43.35               | 0.18             |  |
| 950.0     | 0.17    | 220.90            | 50.0      | 950.0      | 1.5        | 1.5        | -0.3          | 2.1                     | 45.49               | 0.45             |  |
| 1,000.0   | 0.11    | 157.60            | 50.0      | 1,000.0    | 1.4        | 1.4        | -0.3          | 2.0                     | 46.94               | 0.31             |  |

**Javins Corporation**  
Javins Corporation Survey Report



|                  |                                    |                                     |                                        |
|------------------|------------------------------------|-------------------------------------|----------------------------------------|
| <b>Company:</b>  | XTO Energy                         | <b>Local Co-ordinate Reference:</b> | Well Patton C5H                        |
| <b>Project:</b>  | Coretsky/Patton, Butler County, PA | <b>TVD Reference:</b>               | WELL @ 1300.0usft (Original Well Elev) |
| <b>Site:</b>     | Coretsky/Patton                    | <b>MD Reference:</b>                | WELL @ 1300.0usft (Original Well Elev) |
| <b>Well:</b>     | Patton C5H                         | <b>North Reference:</b>             | True                                   |
| <b>Wellbore:</b> | C5H                                | <b>Survey Calculation Method:</b>   | Minimum Curvature                      |
| <b>Design:</b>   | C5H                                | <b>Database:</b>                    | EDM 5000.1 Single User Db              |

| Survey       |            |                      |              |               |               |               |                  |                            |                        |                     |  |
|--------------|------------|----------------------|--------------|---------------|---------------|---------------|------------------|----------------------------|------------------------|---------------------|--|
| MD<br>(usft) | Inc<br>(°) | Azi (azimuth)<br>(°) | CL<br>(usft) | TVD<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | V. Sec<br>(usft) | Closure Distance<br>(usft) | Closure Azimuth<br>(°) | DLeg<br>(°/100usft) |  |
| 1,050.0      | 0.34       | 149.80               | 50.0         | 1,050.0       | 1.2           | 1.5           | -0.1             | 1.9                        | 52.54                  | 0.46                |  |
| 1,100.0      | 0.36       | 137.90               | 50.0         | 1,100.0       | 0.9           | 1.7           | 0.2              | 2.0                        | 61.45                  | 0.15                |  |
| 1,150.0      | 0.36       | 130.40               | 50.0         | 1,150.0       | 0.7           | 1.9           | 0.6              | 2.1                        | 69.74                  | 0.09                |  |
| 1,200.0      | 0.42       | 91.40                | 50.0         | 1,200.0       | 0.6           | 2.3           | 0.8              | 2.3                        | 74.77                  | 0.53                |  |
| 1,250.0      | 0.43       | 88.30                | 50.0         | 1,250.0       | 0.6           | 2.6           | 1.0              | 2.7                        | 76.82                  | 0.05                |  |
| 1,300.0      | 0.45       | 77.70                | 50.0         | 1,300.0       | 0.7           | 3.0           | 1.2              | 3.1                        | 77.57                  | 0.17                |  |
| 1,350.0      | 0.41       | 76.90                | 50.0         | 1,350.0       | 0.7           | 3.4           | 1.4              | 3.4                        | 77.55                  | 0.08                |  |
| 1,400.0      | 0.41       | 69.40                | 50.0         | 1,400.0       | 0.8           | 3.7           | 1.5              | 3.8                        | 77.13                  | 0.11                |  |
| 1,450.0      | 0.50       | 51.10                | 50.0         | 1,450.0       | 1.0           | 4.0           | 1.5              | 4.2                        | 75.49                  | 0.34                |  |
| 1,500.0      | 0.45       | 55.00                | 50.0         | 1,500.0       | 1.3           | 4.4           | 1.5              | 4.6                        | 73.50                  | 0.12                |  |
| 1,550.0      | 0.49       | 44.30                | 50.0         | 1,550.0       | 1.6           | 4.7           | 1.5              | 4.9                        | 71.56                  | 0.19                |  |
| 1,600.0      | 0.32       | 40.90                | 50.0         | 1,600.0       | 1.8           | 4.9           | 1.4              | 5.3                        | 69.72                  | 0.34                |  |
| 1,650.0      | 0.33       | 26.20                | 50.0         | 1,650.0       | 2.1           | 5.1           | 1.3              | 5.5                        | 67.98                  | 0.17                |  |
| 1,700.0      | 0.48       | 27.80                | 50.0         | 1,700.0       | 2.4           | 5.2           | 1.1              | 5.8                        | 65.68                  | 0.30                |  |
| 1,750.0      | 0.45       | 24.00                | 50.0         | 1,750.0       | 2.7           | 5.4           | 0.9              | 6.1                        | 63.23                  | 0.09                |  |
| 1,800.0      | 0.33       | 23.10                | 50.0         | 1,800.0       | 3.0           | 5.6           | 0.8              | 6.3                        | 61.27                  | 0.24                |  |
| 1,825.0      | 0.58       | 3.90                 | 25.0         | 1,825.0       | 3.2           | 5.6           | 0.6              | 6.5                        | 59.93                  | 1.16                |  |
| 1,946.0      | 0.52       | 39.03                | 121.0        | 1,946.0       | 4.3           | 6.0           | 0.0              | 7.4                        | 54.44                  | 0.28                |  |
| 2,041.0      | 1.34       | 226.43               | 95.0         | 2,041.0       | 3.8           | 5.4           | 0.0              | 6.7                        | 54.78                  | 1.95                |  |
| 2,136.0      | 1.67       | 222.50               | 95.0         | 2,135.9       | 2.1           | 3.7           | 0.5              | 4.2                        | 60.95                  | 0.36                |  |
| 2,230.0      | 4.82       | 199.42               | 94.0         | 2,229.8       | -2.7          | 1.5           | 3.0              | 3.1                        | 151.24                 | 3.56                |  |
| 2,325.0      | 9.18       | 190.56               | 95.0         | 2,324.0       | -13.9         | -1.2          | 10.6             | 14.0                       | 185.13                 | 4.71                |  |
| 2,419.0      | 12.38      | 195.60               | 94.0         | 2,416.4       | -31.0         | -5.3          | 22.1             | 31.4                       | 189.77                 | 3.55                |  |
| 2,517.0      | 15.91      | 196.16               | 98.0         | 2,511.4       | -54.0         | -11.9         | 37.0             | 55.3                       | 192.43                 | 3.60                |  |
| 2,612.0      | 19.00      | 196.88               | 95.0         | 2,602.0       | -81.3         | -20.0         | 54.4             | 83.7                       | 193.83                 | 3.26                |  |
| 2,707.0      | 22.06      | 197.23               | 95.0         | 2,691.0       | -113.2        | -29.8         | 74.6             | 117.0                      | 194.75                 | 3.22                |  |
| 2,802.0      | 24.54      | 197.74               | 95.0         | 2,778.2       | -149.0        | -41.1         | 97.2             | 154.6                      | 195.42                 | 2.62                |  |

**Javins Corporation**  
Javins Corporation Survey Report



|                  |                                    |                                     |                                        |
|------------------|------------------------------------|-------------------------------------|----------------------------------------|
| <b>Company:</b>  | XTO Energy                         | <b>Local Co-ordinate Reference:</b> | Well Patton C5H                        |
| <b>Project:</b>  | Coretsky/Patton, Butler County, PA | <b>TVD Reference:</b>               | WELL @ 1300.0usft (Original Well Elev) |
| <b>Site:</b>     | Coretsky/Patton                    | <b>MD Reference:</b>                | WELL @ 1300.0usft (Original Well Elev) |
| <b>Well:</b>     | Patton C5H                         | <b>North Reference:</b>             | True                                   |
| <b>Wellbore:</b> | C5H                                | <b>Survey Calculation Method:</b>   | Minimum Curvature                      |
| <b>Design:</b>   | C5H                                | <b>Database:</b>                    | EDM 5000.1 Single User Db              |

| Survey       |            |                      |              |               |               |               |                  |                            |                        |                     |  |
|--------------|------------|----------------------|--------------|---------------|---------------|---------------|------------------|----------------------------|------------------------|---------------------|--|
| MD<br>(usft) | Inc<br>(°) | Azi (azimuth)<br>(°) | CL<br>(usft) | TVD<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | V. Sec<br>(usft) | Closure Distance<br>(usft) | Closure Azimuth<br>(°) | DLeg<br>(°/100usft) |  |
| 2,897.0      | 27.79      | 195.67               | 95.0         | 2,863.5       | -189.1        | -53.1         | 122.8            | 196.4                      | 195.68                 | 3.55                |  |
| 2,992.0      | 30.65      | 195.47               | 95.0         | 2,946.4       | -233.8        | -65.5         | 151.9            | 242.8                      | 195.66                 | 3.01                |  |
| 3,086.0      | 35.52      | 195.43               | 94.0         | 3,025.1       | -283.2        | -79.2         | 184.1            | 294.1                      | 195.62                 | 5.18                |  |
| 3,181.0      | 41.49      | 195.01               | 95.0         | 3,099.4       | -340.3        | -94.7         | 221.4            | 353.2                      | 195.55                 | 6.29                |  |
| 3,275.0      | 44.88      | 195.43               | 94.0         | 3,167.9       | -402.3        | -111.6        | 262.0            | 417.5                      | 195.50                 | 3.62                |  |
| 3,370.0      | 48.66      | 195.05               | 95.0         | 3,233.0       | -469.1        | -129.8        | 305.7            | 486.7                      | 195.46                 | 3.99                |  |
| 3,465.0      | 48.99      | 194.23               | 95.0         | 3,295.5       | -538.3        | -147.8        | 351.4            | 558.2                      | 195.36                 | 0.74                |  |
| 3,559.0      | 48.10      | 195.09               | 94.0         | 3,357.8       | -606.5        | -165.7        | 396.4            | 628.7                      | 195.28                 | 1.17                |  |
| 3,654.0      | 48.89      | 195.63               | 95.0         | 3,420.7       | -675.1        | -184.5        | 441.2            | 699.8                      | 195.29                 | 0.93                |  |
| 3,748.0      | 47.77      | 195.16               | 94.0         | 3,483.2       | -742.8        | -203.2        | 485.4            | 770.0                      | 195.30                 | 1.25                |  |
| 3,843.0      | 47.77      | 195.11               | 95.0         | 3,547.1       | -810.7        | -221.5        | 529.8            | 840.4                      | 195.28                 | 0.04                |  |
| 3,941.0      | 48.32      | 195.04               | 98.0         | 3,612.6       | -881.0        | -240.5        | 576.0            | 913.3                      | 195.27                 | 0.56                |  |
| 4,035.0      | 48.91      | 195.35               | 94.0         | 3,674.7       | -949.1        | -259.0        | 620.6            | 983.8                      | 195.26                 | 0.67                |  |
| 4,130.0      | 48.08      | 195.92               | 95.0         | 3,737.7       | -1,017.6      | -278.1        | 665.1            | 1,054.9                    | 195.29                 | 0.98                |  |
| 4,224.0      | 48.29      | 195.69               | 94.0         | 3,800.4       | -1,085.0      | -297.2        | 708.7            | 1,125.0                    | 195.32                 | 0.29                |  |
| 4,319.0      | 48.61      | 195.83               | 95.0         | 3,863.4       | -1,153.4      | -316.5        | 753.1            | 1,196.1                    | 195.35                 | 0.35                |  |
| 4,414.0      | 48.11      | 196.94               | 95.0         | 3,926.5       | -1,221.5      | -336.6        | 796.8            | 1,267.1                    | 195.40                 | 1.02                |  |
| 4,508.0      | 48.08      | 196.93               | 94.0         | 3,989.3       | -1,288.5      | -356.9        | 839.3            | 1,337.0                    | 195.48                 | 0.03                |  |
| 4,603.0      | 48.43      | 195.75               | 95.0         | 4,052.5       | -1,356.5      | -376.9        | 883.0            | 1,407.9                    | 195.53                 | 1.00                |  |
| 4,698.0      | 48.78      | 195.92               | 95.0         | 4,115.3       | -1,425.1      | -396.3        | 927.4            | 1,479.1                    | 195.54                 | 0.39                |  |
| 4,792.0      | 47.60      | 195.91               | 94.0         | 4,178.0       | -1,492.4      | -415.5        | 971.0            | 1,549.2                    | 195.56                 | 1.26                |  |
| 4,887.0      | 48.90      | 195.89               | 95.0         | 4,241.3       | -1,560.6      | -435.0        | 1,015.1          | 1,620.1                    | 195.57                 | 1.37                |  |
| 4,982.0      | 48.19      | 195.01               | 95.0         | 4,304.2       | -1,629.2      | -453.9        | 1,059.8          | 1,691.3                    | 195.57                 | 1.02                |  |
| 5,077.0      | 47.57      | 194.74               | 95.0         | 4,367.9       | -1,697.3      | -472.0        | 1,104.6          | 1,761.7                    | 195.54                 | 0.69                |  |
| 5,171.0      | 47.78      | 195.53               | 94.0         | 4,431.2       | -1,764.4      | -490.2        | 1,148.6          | 1,831.2                    | 195.53                 | 0.66                |  |
| 5,266.0      | 49.10      | 196.43               | 95.0         | 4,494.2       | -1,832.7      | -509.7        | 1,192.7          | 1,902.3                    | 195.54                 | 1.56                |  |
| 5,361.0      | 49.41      | 196.08               | 95.0         | 4,556.2       | -1,901.8      | -529.9        | 1,237.1          | 1,974.3                    | 195.57                 | 0.43                |  |

**Javins Corporation**  
Javins Corporation Survey Report



|                  |                                    |                                     |                                        |
|------------------|------------------------------------|-------------------------------------|----------------------------------------|
| <b>Company:</b>  | XTO Energy                         | <b>Local Co-ordinate Reference:</b> | Well Patton C5H                        |
| <b>Project:</b>  | Coretsky/Patton, Butler County, PA | <b>TVD Reference:</b>               | WELL @ 1300.0usft (Original Well Elev) |
| <b>Site:</b>     | Coretsky/Patton                    | <b>MD Reference:</b>                | WELL @ 1300.0usft (Original Well Elev) |
| <b>Well:</b>     | Patton C5H                         | <b>North Reference:</b>             | True                                   |
| <b>Wellbore:</b> | C5H                                | <b>Survey Calculation Method:</b>   | Minimum Curvature                      |
| <b>Design:</b>   | C5H                                | <b>Database:</b>                    | EDM 5000.1 Single User Db              |

| Survey       |            |                      |              |               |               |               |                  |                            |                        |                     |  |
|--------------|------------|----------------------|--------------|---------------|---------------|---------------|------------------|----------------------------|------------------------|---------------------|--|
| MD<br>(usft) | Inc<br>(°) | Azi (azimuth)<br>(°) | CL<br>(usft) | TVD<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | V. Sec<br>(usft) | Closure Distance<br>(usft) | Closure Azimuth<br>(°) | DLeg<br>(°/100usft) |  |
| 5,438.0      | 47.56      | 194.85               | 77.0         | 4,607.2       | -1,957.4      | -545.3        | 1,273.3          | 2,031.9                    | 195.57                 | 2.68                |  |

|                   |                    |             |
|-------------------|--------------------|-------------|
| Checked By: _____ | Approved By: _____ | Date: _____ |
|-------------------|--------------------|-------------|