

**Worksheet for an Operating Permit**

**Knife River Corporation – Well #3**

**BVOP-0277**

**Knife River Corporation seeks an Operating Permit for the purpose of:**

- **Industrial Use**

Existing Well #3

Date Drilled: **January 30, 2014**

Tract Size: **333.4273 acres**

Located at: N 30.61234072° W 96.47897341° 2.32 miles SW of the intersection of Goodson Bend Road and Texas Hwy 47 in Brazos County

Beneficial Use: **Industrial Use** (Sand/Gravel Plant)

Aquifer of Origin: **Sparta**

Well Column: **6"**

Rate of Production: **150 gpm**

Max. Annual Production: **150 acre feet/year for each well**

This application meets all of the specifications listed in BVGCD Rule 7.1 (c) regarding production based acreage. Below are the calculations verifying the applicant's compliance:

$150 \text{ acre feet/year} \times .62 = 93 \text{ gpm}$  on an average annual basis

$93 \times 2' / \text{aagpm for minor aquifer wells} = 186'$  radius from the wellhead

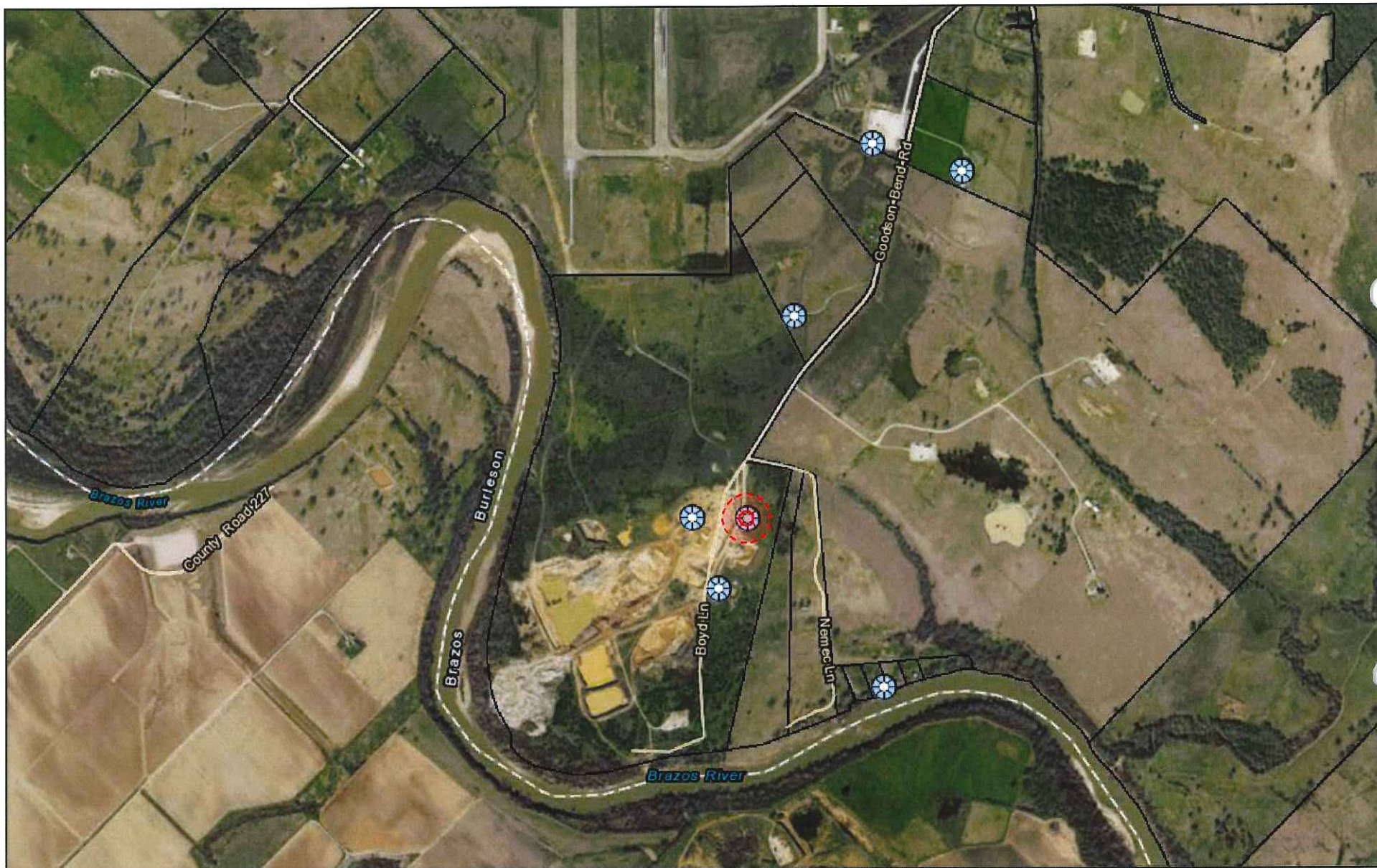
$186' \times 186' \times 3.14 = 108,631.44$  square feet around the well

$108,631.44 / 43,560 = \mathbf{2.494}$  contiguous acres to be assigned to the well.

**Application is administratively complete.**


**The recommendation of the General Manager is that the permit be approved.**

# Knife River Well #3 - Sparta - N 30.61234072 W 96.47897341 - 150 ac-ft/yr - 186' radius



April 23, 2017

**polygonLayer**

 Override 1

 Override 2



BVGCD Wells

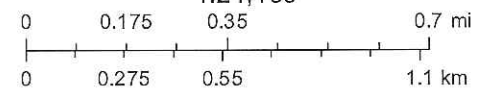


Brazos CAD Parcels



Robertson CAD Parcels

1:21,169




Half Associates Inc.  
Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors

# Knife River Corporation South - BVOP-0277 - Sparta - 150 ac-ft/yr - 186' radius




April 12, 2017

**polygonLayer**

 Override 1

**polygonLayer**

 Override 1



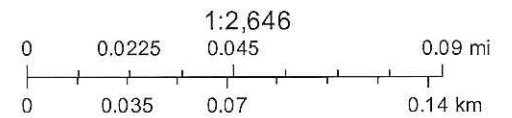
BVGCD Wells



Brazos CAD Parcels



Robertson CAD Parcels



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Well Report: Tracking #:353790

Page 1 of 2

### STATE OF TEXAS WELL REPORT for Tracking #353790

Owner:	Halcon Resources	Owner Well #:	No Data
Address:	1000 Louisiana Ste 6700 Houston, TX 77002	Grid #:	59-29-1
Well Location:	O'Sarge Frac Gravel Plant, TX	Latitude:	30° 36' 44" N
Well County:	Brazos	Longitude:	096° 28' 44" W
Elevation:	No Data	GPS Brand Used:	Garmin
Type of Work:	New Well	Proposed Use:	Industrial

Drilling Date: Started: 1/30/2014  
Completed: 1/30/2014

Diameter of Hole: Diameter: 12 1/4 In From Surface To 80 ft  
Diameter: 9 7/8 In From 80 ft To 680 ft

Drilling Method: Mud Rotary

Borehole Completion: Gravel Packed From: (No Data) ft to (No Data) ft  
Gravel Pack Size: Other: 150# hole plug

Annular Seal Data: 1st Interval: From 0 ft to 10 ft with 8 cement (#sacks and material)  
2nd Interval: No Data  
3rd Interval: No Data  
Method Used: pour  
Cemented By: driller  
Distance to Septic Field or other Concentrated Contamination: No Data  
Distance to Property Line: No Data  
Method of Verification: No Data  
Approved by Variance: No Data

Surface Completion: Surface Sleeve Installed

Water Level: Static level: No Data  
Artesian flow: No Data

Packers: paper 10'

Plugging Info: Casing or Cement/Bentonite left in well: No Data

Type Of Pump: Other: air jetted  
Depth to pump bowl: 240 ft

Well Tests: Estimated  
Yield: 175 GPM with 0 ft drawdown after 1 hour

Water Quality: Type of Water: No Data  
Depth of Strata: 500 ft.  
Chemical Analysis Made: No  
Did the driller knowingly penetrate any strata which contained undesirable constituents: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.

Well Report: Tracking #:353790

Page 2 of 2

Company Information: **LTW Servicea, LP**  
**P.O. Box 1397**  
**Kilgore, TX 75663**

Driller License Number: **58068**

Licensed Well Driller Signature: **Micheal Ligon**

Registered Driller Apprentice Signature: **No Data**

Apprentice Registration Number: **No Data**

Comments: **No Data**

**IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY**

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking number (Tracking #353780) on your written request.

**Texas Department of Licensing & Regulation**  
**P.O. Box 12157**  
**Austin, TX 78711**  
**(512) 463-7880**

**DESC. & COLOR OF FORMATION MATERIAL**

From (ft) To (ft) Description

0-80 sand w/gravel

80-180 sand

180-340 clay

340-380 sand

380-480 clay

480-520 sand

520-580 clay

580-680 sand w/clay layers

**CASING, BLANK PIPE & WELL SCREEN DATA**

Dia.	New/Used	Type	Setting From/To
10"	new	blank	0 to 80 sch40
6"	new	blank	0 to 580 sdr17
6"	new	slotted	580 to 680 .020



**Operating Permit**  
**Issued By Direction of the Board of Directors of the**  
**Brazos Valley Groundwater Conservation District**

This **Operating Permit** is granted to **Knife River Corporation** (Permittee) authorizing the Permittee to operate a water well known as **Well #3** ("Well") at the location specified below within the Brazos Valley Groundwater Conservation District (District) for the beneficial purpose of producing water for **Industrial** use. Permittee is authorized to operate the Well located at **N 30.61234072° and W 96.47897341°** to produce water from the **Sparta Aquifer** at an annual maximum capacity not to exceed **150 GPM** and a maximum annual production of **150 acre feet/year**.

**Operating Permit Term:**

- (a) An operating and drilling permit for a well or well site will automatically expire within three years from its issuance if the permitted well(s) has not been completed or is not significantly under development.
- (b) Unless specified otherwise by the Board or these Rules, operating permits are effective for five-year terms. At the end of each five-year term, the permit shall be renewed by the Board for an additional five-year term, upon submittal of a permit renewal application by the permit holder that provides adequate evidence of continued beneficial use for the permitted amount of water withdrawal. The District shall send notices to permit holders that contain the permit renewal applications, prior to permit expirations.
- (c) The District may amend or revoke an operating permit at any time if there is evidence of:
  - (1) the owner or operator of the well or well system has operated in violation of their permit, District Rules, or Chapter 36 of the Texas Water Code; or
  - (2) a change in the permit is required to prevent waste and achieve water conservation, minimize as far as practicable the drawdown of the water table or reduction of artesian pressure, lessen interference between wells, or control and prevent subsidence; or
  - (3) The permitted well(s) has not been completed, is not significantly under construction; or no significant progress is being made toward construction.

This permit is issued and effective as of May 11, 2017.

**Special Provisions/Notes: None**

This Permit is granted subject to these Rules, orders of the Board, and the laws of the State of Texas. In addition to any special provisions or other requirements incorporated into the permit issued by the District.

- (1) This Permit is granted in accordance with provisions of the Rules of the District, including amendments, and acceptance of this Permit constitutes an acknowledgment and agreement that Permittee will comply with the Rules of the District.
- (2) This Permit confers only the right to operate the permitted well under the provisions of the District Rules and its terms may be modified or amended pursuant to the provisions of those Rules. To protect the permit holder from the illegal use of a new landowner, within ten (10) days after the date of sale of property containing a well having been issued an operating permit, the operating permit holder must notify the District in writing of the name of the new owner. Any person who becomes the owner of a currently permitted well must, within forty-five (45) calendar days from the date of the change in ownership, file an application for a permit amendment to affect a transfer of the permit.
- (3) The operation of the well for the authorized purposes must be conducted in a non-wasteful manner.
- (4) All groundwater production from non-exempt wells in the District is required to be metered, except for the groundwater produced from wells in the Brazos River Alluvium aquifer. The District maintains the discretion to require meters on wells in the Brazos River Alluvium aquifer. Permittee shall maintain records of withdrawal on the property where the well is located or at its business office, and shall make those records available to the District for inspection. The Permittee shall submit complete, accurate, and timely metered pumpage and transport reports to the District annually, as requested by the District, no later than February first (1<sup>st</sup>) of each year.
- (5) The well site must be accessible to District representatives for inspection, and Permittee agrees to cooperate fully in any reasonable inspection of the well and well site by the District representatives.
- (6) The application pursuant to which this Permit has been issued is incorporated in this Permit, and this Permit is granted on the basis of and contingent upon the accuracy of the information supplied in that application. A finding that false information has been supplied is grounds for immediate revocation of the permit.
- (7) Violation of this Permit's terms, conditions, requirements, or special provisions, including pumping amounts in excess of authorized withdrawal, is punishable by civil penalties as provided by the District Rule 15.3, as well as revocation of the permit.
- (8) Permittee will use reasonable diligence to protect groundwater quality and will follow well-plugging guidelines at the time of well closure.

The issuance of this Permit does not grant to Permittee the right to use any private property, or any public property, for the production or conveyance of water. Neither does this permit authorize the invasion of any personal rights nor the violation of any federal, state, or local laws, rules or regulations. Further, the District makes no representations and shall have no responsibility with respect to the availability or quality of water authorized to be produced under this permit.

**Brazos Valley Groundwater Conservation District**

By: \_\_\_\_\_ Date \_\_\_\_\_  
**Alan M. Day, General Manager**