Worksheet for an Amendment to an Operating Permit Major Oak Power, LLC – BVHU-0044

The General Manager seeks an amendment to one Operating Permit (BVHU-0044) for the purpose of:

Public Supply Use

Existing Well:-

TOP PWW #1 (BVHU-0044) - Located at: N 31.09186823° W 96.696433° 1.05 miles E of the intersection of SH-6 and Plant Road in Robertson County

Beneficial Use: Public Supply Use

Aquifer of Origin: Hooper

Well Column: 6"

Date Drilled: April 23, 2009 (Replacement well)

Depth: 460'

Rate of Production: 50 gpm

Max. Annual Production: 8.1 acre-feet/year

The General Manager is requesting an amendment to the existing Historic Use permit to properly identify the aquifer of origin. When originally permitted, it was presented as a Simsboro well. Recent geological review reveals the screened interval is the Hooper Aquifer.

It is the recommendation by the General Manager to approve amending the permit to reflect the proper aquifer of origin as the Hooper Aquifer.

Historic Use Application Summary

Applicant: Twin Oaks Power Plant

County: Robertson

Aquifer: Simsboro

Well 1 2,887 Acre Feet (TOP WW1)
Well 2 2,508 Acre Feet (TOP WW2)
Well 3 2,116 Acre Feet (TOP WW 3)
Well 4 8.1 Acre Feet (TOP PWW1)

<u>Use and Location:</u> Well numbers 1, 2 and 3 are used for Generation of Electricity in Robertson County, well number four is used as potable water.

Max Pumping Rate:

Well 1 2,500GPM

Well 2 2,500GPM

Well 3 2,500GPM

Well 4 50GPM

Twin Oaks Power has declared that they will comply with the Districts Management plan and well plugging guidelines.

Please use black ink.
Send original copy, by
certified mail to the
Texas Water Commission
P.O. Box 13087
Austin, Texas 78711

State of Texas WATER WELL REPORT



Texas Water Well Drillers Board P. O. Box 13087 Austin, Texas 78711

ATTENTION OWNER: Confidentiality Privilege Notice on Reverse Side 1) OWNER WCZ Consortium Address P.O. Box 21130 San Antonio, 2) LOCATION OF WELL: N county. Robertson miles in Calvert (N.E., S.W., etc.) (Town) Well Number Two ☐ Legal description: Driller must complete the legal description to the right Section No. _ with distance and direction from two intersecting sec-tion or survey lines, or he must locate and identify the well on an official Quarter- or Half-Scale Texas County General Highway Map and attach the map to this form. Abstract No. ____ Survey Name Distance and direction from two intersecting section #2. KD See attached map. On 39-59-2 3) TYPE OF WORK (Check): 4) PROPOSED USE (Check): 5) DRILLING METHOD (Check): ☐ Driver New Well Deepening □ Domestic □ Industrial □ Monitor ∴ Public Supply Mud Rotary Air Hammer Jetted Bored Reconditioning Plugging ☐ Irrigation ☐ Test Well ☐ Injection ☐ Other. ☐ Air Rotary ☐ Cable Tool ☐ Other 6) WELL LOG: DIAMETER OF HOLE 7) BOREHOLE COMPLETION: Dia. (in.) To (ft.) Date Drilling: From (ft.) Open Hole Straight Wall (X) Underreamed 132 19 88 Surface 401 Started_ ☆ Gravet Packed Other _ 19 88 401 9 7/8 443 Completed_ 367 _ft. to _443 If Gravel Packed give interval . . . from _ 15 411 440 Description and color of formation To (ft.) 8) CASING, BLANK PIPE, AND WELL SCREEN DATA: Ò 35 45 New Steel, Plastic, etc. Gage Casing Screen Clay Setting (ft.) Perf., Slotted, etc. 35 45 (in.) Sand Screen Mgf., if commercial From To 60 Clay 8 N Steel 0 401 60 130 Sand 4 N Steel 360 407 Clay 130 165 4 N Stainless Steel Screen 407 437 .035 165 195 Clay & Sand 4 N Steel 195 231 Sand 231 307 Shale 9) CEMENTING DATA [Rule 319.44(b)] 307 308 _ft. to _401_ft. No. of Sacks Used __165 Rock 308 312 Shale ft. to _ _ft. No. of Sacks Used. 312 332 Sandy Shale Pressure Method used 332 333 Rock Cemented by_ Western Company 333 355 355 Sandy Shale 375 Sand 10) SURFACE COMPLETION Shelen 375 388 Specified Surface Slab Installed [Rule 319.44(c)] 388 389 ☐ Pitless Adapter Used [Rule 319.44(d)] Rock 389 405 ☐ Approved Alternative Procedure Used [Rule 319.71] Shale 405 410 Sa. AAY 27 1988 11) WATER LEVEL: 411 410 Rock Date_4/4/88 411 440 Sand Static level_ ft, below land surface CSMATER CUMMISSIO 467 Artesian flow. gpm. Date. 12) PACKERS: Type Depth REMARKS: Well chlorinated during graveling, at completion, and after installing the pump. 13) TYPE PUMP: ☐ Turbine □Jet X Submersible ☐ Cylinder Other (Use reverse side if necessary) Depth to pump bowls, cylinder, jet, etc., ___ 15) WATER QUALITY: Did you knowingly penetrate any strata which contained undesirable 14) WELL TESTS TX No [**X**Pump If yes, submit "REPORT OF UNDESIRABLE WATER" Type Test: ☐ Bailer ☐ Jetted Type of water?_ Yield: 110 gpm with _ _ Depth of strata. _ft. drawdown after _12_ hrs. I here by certify that this well was drilled by me (or under my supervision) and that each and all of the statements herein are true to the best of my knowledge and belief. I understand that failure to complete items 1 thru 12 will result in the log(s) being returned for completion and resubmittal. COMPANY NAME BRIEN WATER WELLS Water Well Driller's License No. _____1750 (Type or Print) Rt. 1 Box 702 **ADDRESS** Hearne 77859 (Street of AFD) (City) (Signed) (Signed) Licensed Water Well Driller) (Registered Driller Trainee) For TWC use only Well No. 39-59-2 Please attach electric log, chemical analysis, and other pertinent information, if available.

STATE OF TEXAS WELL REPORT for Tracking #209946 Owner: Twin Oaks Power Owner Well #: No Data Address: PO Box 37 Grid #: 39-59-2 Bremond, TX 76629 Latitude: 31° 05' 31" N Well Location: **Plant Road** Calvert, TX 77837 096° 41' 47" W Longitude: Well County: Robertson No Data Elevation:

Type of Work: Replacement Proposed Use: Public Supply

Drilling Start Date: 3/4/2009 Drilling End Date: 4/23/2009

Plans Approved by TCEQ - YES

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	12.25	0	450
	6.75	0	460

Drilling Method: Mud (Hydraulic) Rotary

Borehole Completion: Filter Packed

Top Depth (ft.) Bottom Depth (ft.) Filter Material Size Filter Pack Intervals: 360 460 Gravel 12-20 Top Depth (ft.) Bottom Depth (ft.) Description (number of sacks & material) Annular Seal Data: 0 360 249 Portland

Seal Method: Pressure Distance to Property Line (ft.): 100+

Sealed By: **Driller**Distance to Septic Field or other concentrated contamination (ft.): **100+**

Distance to Septic Tank (ft.): No Data

Method of Verification: Measured

Method of Verification: **Measured**

Surface Completion: Surface Slab Installed

Water Level: 132 ft. below land surface on 2009-03-23 Measurement Method: Unknown

Packers: 4 x 2.5 RL K-Packer 401'

Type of Pump: Submersible Pump Depth (ft.): 347

Well Tests: Pump Yield: 85 GPM with 100 ft. drawdown after 24 hours

Strata Depth (ft.)

Water Type

Water Quality:

357 - 438

Potable

Chemical Analysis Made: Yes

Did the driller knowingly penetrate any strata which

contained injurious constituents?: Unknown

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 report(s) being returned for completion and resubmittal.

Company Information: **Brien Water Wells**

> 5214 Hwy 6 South Hearne, TX 77859

Driller Name:

Pete Brien

License Number:

1750

Comments:

\$mew

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:				
BLANK	PIPE	& WEL	LSCRE	EN DATA

DESCRIP	TION & COL	OR OF FORMATION MATERIAL	Casing: BLANK PIPE & WELL SCREEN DATA
Top (ft.)	Bottom (ft.)	Description	Dia. (in.) New/Used Type Setting From/To (ft.)
0	52	Sandy Clay and Sand	6 New Steel Casing +2.5 - 405
52	63	Sandy Shale	6 New Stainless St. Pipe Based Screen 405 - 435 .026
63	128	Sand (Coarse)	6 New Steel Casing 435 - 437
128	200	Sandy Shale and Sand	
200	260	Sand	
260	278	Sandy Shale and Sand	
278	278.5	Rock	
278.5	333	Sandy Shale	
333	334	Rock	
334	347	Sandy Shale	
347	348	Rock	
348	357	Sandy Shale	
357	381	Sand (B)	
381	388	Sandy Shale and Sand	
388	389	Rock	
389	411	Sandy Shale and Sand	
100.000			

438

460

Sand (B)

Sandy Shale and Sand

411

438

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357 - 438

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63	128	Sand (Coarse)	6 New Steel Casing 435 - 437
128	200	Sandy Shale and Sand	
200	260	Sand Most Likely Base	e of Simsboro 260 ft,
260	278	Sandy Shale and Sand	·
278	278.5	Rock	
278.5	333	Sandy Shale	
333	334	Rock	
334	347	Sandy Shale	
347	348	Rock	
348	357	Sandy Shale	
357	381	Sand (B)	
381	388	Sandy Shale and Sand	
388	389	Rock	
389	411	Sandy Shale and Sand	
411	438	Sand (B)	

460

Sandy Shale and Sand

438

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

This **Historic Use Permit** is granted to **Major Oak Power, LLC (Twin Oaks)** (Permittee) authorizing the Permittee to operate a water well known as **TOP PWW #1** ("Well") at the location specified below within the Brazos Valley Groundwater Conservation District (District) for the beneficial purpose of producing water for **Public Supply** use. This permit is conditioned upon and subject to the Permittee complying with the Rules of the District ("Rules"), orders of the Board and the Management Plan of the District, as amended, and the laws, rules and regulations of the State of Texas, as amended, applicable to drilling, operating and maintaining water wells within the District. This permit confers only the right to use the permit under the provisions of the Rules and according to the terms of this permit. The permit terms may be modified or amended pursuant to the Rules.

The Permittee is authorized to operate the Well located at N 31.09186823° and W 96.696433° to produce water from the Hooper Aquifer at a maximum capacity not to exceed 50 GPM and a maximum annual production of 8.1 acre feet.

The Rules are incorporated herein in their entirety by reference, as if set forth herein verbatim. The Permittee shall comply with the Rules and each requirement thereof in operating, maintaining, repairing and altering the Well. The application pursuant to which this permit has been issued is incorporated into 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 to the District in the permitting process for the Well is grounds for revocation of this permit.

The issuance of this permit does not grant to the 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.

This Historic Use Permit will remain in effect for the life of the well as long as water is being produced for the herein specified beneficial use, subject to the District's Rules, Management Plan, and State laws.

This permit was originally issued and effective on December 1, 2005. This permit was corrected to properly reflect the aquifer of origin on June 11, 2020.

Brazos Valley Groundwater Conservation District	
By: Name: Alan M. Day Title: General Manager Date:	Permit No. BVHU-0044

Brazos Valley Groundwater Conservation District

*This historic permit was corrected on June 11, 2020 to properly identify the aquifer of origin. The permit correction does not affect the historic integrity of the originally issued historic permit.