

200 N. La Salle, Suite 2100 Chicago, IL 60601 (312) 589-7554 clauson@ussilica.com

May 22, 2015

Mr. Anthony Mackey Oklahoma Water Resources Board (OWRB) 3800 N. Classen Boulevard Oklahoma City, OK 73118

Re:

Owned Acreage for MEPS Calculation

U.S. Silica Facility, 4800 Oklahoma Highway 1 North, Mill Creek, OK

Dear Mr. Mackey:

Per your meeting at the U.S. Silica facility with George Matthews, Plant Manager, on May 13, 2015, this letter has been prepared as a summary of the property U.S. Silica owns overlying the Arbuckle-Simpson Aquifer (ASA). Our understanding is that, due to our status as an exempt mine, we will receive a water allotment of 0.2 acre-feet per year for all of our owned property, whether that acreage has been dedicated for use under the groundwater permit.

The enclosed table shows acreage owned by U.S. Silica over the ASA. This acreage amount of 2160.37 acres was obtained from tax bills paid by U.S. Silica to the Johnston County and Murray County Treasurers. Using this total acreage, the new groundwater allotment is calculated to be approximately 432.074 acre-feet per year. U.S. Silica respectfully requests that our allotment allowance be adjusted upward to meet this calculated number.

If you have any questions or concerns regarding this report, please contact me at the above email address and/or telephone number.

Sincerely,

David Clauson

Senior Manager, Environmental Programs

Attachment:

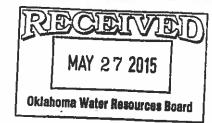
Acreage Summary Table

Cc:

George Matthews, Mill Creek

file

Mr. Mackey May 14, 2015 Page 2



County	Acreage Owned	Description
Murray	30.23	Section 14 1N-4E, NE NE (EX. 9.77 A)
	35.39	Section 11 1N-4E, E2 E2 SE (EX. 4.61 A)
	238.5	Section 11 1N-4E W2 NW & SE NW & SW NE NW & SW NE & W2 NE NE (EX. 1.5 A) & E2 NW NE & N2 NW SE & NW NE SW
Johnston	359.21	Section 6-2S-5E & Lots 1, 2, 3 & S/2 Lot 4 & NE NW NW & Lots 5, 6 East of HWY & NE SW & N 200' SE. Combined #'s 2-002-00 & 3-001-00 & 4-001-00
	74.24	Section 11-1S-4E BEG SW/C SEC 11-1S-4E; TH E ALNG SEC LNE & CENTER-LINE OF COUNTY ROAD 736.82'; TH N 30' TO POB TH N 1300.0' E 2089.85' TO A PT ON W R/W LNE ST. LOUIS & SAN FRANCISCO RR; TH ALNG CUR TO LEFT HAV RAD 3107.93' & DELTA ANGLE OF 29 DEG 35' 1604.71' ALNG SAID RR R/W LNE & COUNTY ROAD R/W LNE TH W ALNG COUNTY ROAD R/W LNE 3000.00' TO POB
	506.89	Section 14-1S-4E E/2 E/2 NW AND NE NE S OF HY AND W/2 SW NE (LESS R/W) AND NE SE NE AND NW NE AND W/2 SE NE AND E/2 SW NE AND E/2 SE AND E/2 W/2 SE AND NW NW SE AND SE SE NE AND W/2 NW AND W/2 E/2 NW AND W/2 SW AND W/2 E/2 SW AND NE NE SW
1	40	Section 14-15-4E 1/3 INT IN NW SW SE AND SW NW SEN AND NE SE SW AND SE NE SW
	80	Section 22-1S-4E NW NE AND W/2 NE NE AND NE SW NE AND NW SE NE
	20	Section 22-1S-4E E/2 NE NE
	160	Section 23-15-4ENW
	82.08	Section 10-15-4E ALL THAT PART OF THE SE & OF THE E/2 SW LYING SOUTH OF THE CENTERLINE OF THE COUNTY ROAD
	533.83	Section 15-1S-4E E/2 & E/2 NW & 26.30 AC IN NW NW & SW LESS 5 990' OF W 2310'

Total 2160.37

Source: Murray County Treasurer, Johnston County Treasurer

0.2 acre-feet per year per acre

432.074 calculated allotment



March 20, 2020

RECEIVED

MAR 26 2020

Oklahoma Water Resources Board

Kent Wilkins, Chief of Planning and Management Oklahoma Water Resources Board 3800 North Classen Boulevard Oklahoma City, OK 73118-2855

RE: Groundwater Right 1974 0266

Dear Mr. Wilkins,

US Silica would like to update the record of lands owned and leased over the Arbuckle Simpson Aquifer to be applied in the calculation of the company's maximum equal proportionate share (MEPS). No additional well is proposed or planned for the foreseeable future. The following supporting information is attached:

Attachment A
Attachment B
Attachment C
Attachment C
Attachment C
Attachment C
Attachment D
Attachment D
Summary of Water Right Acreage by section
Attachment A
Lease of Groundwater Rights (David Byers)
Lease of Groundwater Rights (Fob Jones)

Thank you very much for your help in this matter and do not hesitate to contact me if you require additional information.

Sincerely,

George W. Matthews

Plant Manager

CC: David Olchawa, US Silica (with Attachment A only)
Wes Penn, US Silica (with Attachment A only)

Braciernad

MAR 2 6 2020

Oklahoma Water Resources Board

ATTACHMENT A US SILICA

SUMMARY OF WATER RIGHT ACREAGE



MAR 26 2020

Oklahoma Water Resources Board

NORTH PLANT OWNED

Dwg OK JO 002-1

1S-4E

15

Tract Water Right Water T-R Section **Tract Name** Acres Acres Acres Right a-f 1S-4E 10 E 1/2 Gist 80 SE 1/4 80.0 80.0 16.0 20 Gist 1S-4E 10 E 1/2 NW 1/4 SE 1/4 20.0 20.0 4.0 Gist 20 1S-4E 10 E 1/2 SW 1/4 SE 1/4 20.0 20.0 4.0 Johnson 40 1S-4E 10 SE 1/4 SW 1/4 40.0 40.0 8.0 Johnson 40 1S-4E 10 NE 1/4 SW 1/4 40.0 40.0 8.0 20 20.0 Johnson 1S-4E 10 W 1/2 NW 1/4 SW 1/4 20.0 4.0 10 Johnson 1S-4E 10 NE 1/4 SW 1/4 2.0 NW 1/4 10.0 10.0 10 1S-4E 2.0 Johnson 10 SE 1/4 NW 1/4 SW 1/4 10.0 10.0 20 Johnson 1S-4E 10 W 1/2 NW 1/4 SE 1/4 20.0 20.0 4.0 20 1S-4E 10 W 1/2 SW 1/4 20.0 4.0 Johnson SE 1/4 20.0 1S-4E Deeded to Long (190)10 all unmined acres in Section 10 -190.0-38.01S-4E 10 90.0 90.0 18.0 74 1S-4E S 1/2 Freeze 11 SW 1/4 irregular shape 74.0 74.0 14.8 1S-4E 11 74.0 74.0 14.8 139 1S-4E 14 Hampton N 1/2 NE 1/4 irregular shape 139.0 139.0 27.8 Helvey 80 1S-4E 14 W 1/2 NW 1/4 80.0 80.0 16.0 Helvey 40 1S-4E 14 W 1/2 E 1/2 NW 1/4 40.0 40.0 8.0 80 14 1S-4E W 1/2 SW 1/4 80.0 80.0 16.0 Helvey Helvey 40 1S-4E 14 W 1/2 E 1/2 SW 1/4 40.0 40.0 8.0 10 1S-4E 14 NE 1/4 NE 1/4 SW 1/4 2.0 Helvey 10.0 10.0 Helvey 80 1S-4E 14 E 1/2 SE 1/4 80.0 80.0 16.0 40 1S-4E 14 E 1/2 W 1/2 SE 1/4 40.0 40.0 8.0 Helvey 20 14 SW 1/4 NE 1/4 Helvey 1S-4E E 1/2 20.0 20.0 4.0 20 1S-4E 14 W 1/2 Helvey SE 1/4 NE 1/4 20.0 20.0 4.0 1S-4E 10 14 SE 1/4 SE 1/4 2.0 Helvey NE 1/4 10.0 10.0 10 NW 1/4 Helvey 1S-4E 14 NW 1/4 SE 1/4 10.0 10.0 2.0 1S-4E 14 569.0 569.0 113.8 Campbell 20 1S-4E 15 S 1/2 NW 1/4 SE 1/4 20.0 20.0 4.0 1S-4E Campbell 40 15 SW 1/4 SE 1/4 40.0 8.0 40.0 Campbell 20 1S-4E 15 W 1/2 SE 1/4 SE 1/4 20.0 20.0 4.0 Gist 80 1S-4E 15 E 1/2 NW 1/4 80.0 80.0 16.0 Gist 20 1S-4E 15 N 1/2 NW 1/4 NE 1/4 20.0 20.0 4.0 40 1S-4E 15 NE 1/4 Helvey NE 1/4 40.0 40.0 8.0 Helvey 80 1S-4E 15 S 1/2 NE 1/4 80.0 80.0 16.0 Helvey 20 1S-4E 15 S 1/2 NW 1/4 NE 1/4 20.0 20.0 4.0 Helvey 20 1S-4E 15 N 1/2 NW 1/4 SE 1/4 20.0 20.0 4.0 Reynolds 40 1S-4E 15 NE 1/4 SE 1/4 40.0 40.0 8.0 20 Reynolds 1S-4E 15 E 1/2 SE 1/4 SE 1/4 20.0 20.0 4.0 Stinson 80 1S-4E 15 N 1/2 SW 1/4 80.0 80.0 16.0 Stinson 20 1S-4E 15 N 1/2 N 1/2 20.0 S 1/2 SW 1/2 20.0 4.0 Stinson 5 1S-4E 15 E 1/2 SE 1/4 SE 1/4 SW 1/4 5.0 5.0 1.0 Stinson 3 1S-4E 15 SE 1/4 NE 1/4 SE 1/4 SW 1/4 3.0 3.0 0.6

508.0

101.6

NORTH P	LANT	Dwg OK	JO 002-	1				Tract	Water Right	Water
OWNED	Tract Name	Acres	T-R	Section				Acres	Acres	Right a-f
	Campbell	40	1S-4E	22	NW 1/4	NE 1/4		40.0	40.0	8.0
	Campbell	20	1S-4E	22	W 1/2	NE 1/4	NE 1/4	20.0	20.0	4.0
	Campbell	10	1S-4E	22	NW 1/4	SE 1/4	NE 1/4	10.0	10.0	2.0
	Campbell	10	1S-4E	22	NE 1/4	SW 1/4	NE 1/4	10.0	10.0	2.0
	Reynolds	20	1S-4E	22	E 1/2	NE 1/4	NE 1/4	20.0	20.0	4.0
			1S-4E	22				100.0	100.0	20.0
	Helvey	160	1S-4E	23	NW 1/4			160.0	160.0	32.0
			1S-4E	23				160.0	160.0	32.0

NORTH PLANT OWNED TOTAL

 Tract
 Water Right
 Water

 Acres
 Acres
 Right a-f

 1501.0
 1501.0
 280.2

SOUTH PI	LANT	Dwg OK	JO 006-	1					Tract	Water Right	Water
OWNED	Tract Name	Acres	T-R	Section					Acres	Acres	Right a-f
	Lots 1 & 2	160	2S-5E	6	NE 1/4				160	160	32
	Lots 1 & 2	19	2S-5E	6	S 1/2	NE 1/4	NW 1/4		19	19	4
	Lot 3	20	2S-5E	6	N 1/2	NE 1/4	NW 1/4		20	20	4
	Lot 4	17	2S-5E	6	NE 1/4	NW 1/4	NW 1/4		17	17	3
	Lot 4	10	2S-5E	6	S 1/2	NW 1/4	NW 1/4		10	10	2
	Lot 5	26	2S-5E	6	SE 1/4	NW 1/4			26	26	5
	Lot 5	25	2S-5E	6	SW 1/4	NW 1/4			25	25	5
	Kemp	40	2S-5E	6	NE 1/4	SW 1/4			40	40	8
	MC Sand	40	2S-5E	6	NW 1/4	SW 1/4			40	40	8
	Clement	12	2S-5E	6	N 1/2	N 1/2	N 1/2	SF 1/4	12	12	2

SOUTH PLANT OWNED TOTAL

RECEIVED

Tract	Water Right	Water
Acres	Acres	Right a-f
368.9	368.9	73.8

HICKORY OWNED

								Tract	Water Right	Water
Name	Acres	T-R	Section					Acres	Acres	Right a-f
US Silica	80	1N-4E	11		W2	NW4		80.0	80.0	16.0
US Silica	40	1N-4E	11		SE4	NW4		40.0	40.0	8.0
US Silica	10	1N-4E	11	SW4	NE4	NW4		10.0	10.0	2.0
US Silica	10	1N-4E	11	NW4	NE4	SW4		10.0	10.0	2.0
US Silica	40	1N-4E	11		SW4	NE4		40.0	40.0	8.0
US Silica	20	1N-4E	11	E2	NW4	NE4		20.0	20.0	4.0
US Silica	20	1N-4E	11	W2	NE4	NE4		20.0	20.0	4.0
US Silica	20	1N-4E	11	N2	NW4	SE4	100	20.0	20.0	4.0
US Silica	40	1N-4E	11	E 1/2	E 1/2	SE 1/4		40	40	8
		1N-4E	11					280.0	280.0	56.0
Dodd	20	1N-4E	14	N2	NE4	NE4		20.0	20.0	4.0
Dodd	10	1N-4E	14	N2	S2	NE4	NE4	10.0	10.0	2.0
Dodd	3	1N-4E	14	SE4	SE4	NE4	NE4	3.0	3.0	0.6
		1N-4E	14					33.0	33.0	6.6

HICKORY OWNED TOTAL

Tract	Water Right	Water
Acres	Acres	Right a-f
313.0	313.0	62.6

HICKORY LEASED

								Tract	Water Right	Water
Tract Name	Acres	T-R	Section					Acres	Acres	Right a-f
Byers 9A	20	1N-4E	2	E 1/2	SE 1/4	SW 1/4		20.0	10.0	2.0
Byers 9A	20	1N-4E	2	W 1/2	SW 1/4	SE 1/4		20.0	10.0	2.0
Byers 9A	10	1N-4E	2	W 1/2	E 1/2	SW 1/4	SE 1/4	10.0	5.0	1.0
Byers 9A	3	1N-4E	2	SE 1/4	SE 1/4	SW 1/4	SE 1/4	2.5	1.3	0.3
Byers 9A	40	1N-4E	2	W 1/2	W 1/2	NE 1/4		40.0	20.0	4.0
Byers 9A	20	1N-4E	2	W 1/2	NW 1/4	SE 1/4		20.0	10.0	2.0
Byers 9A	40	1N-4E	2	E 1/2	W 1/2	SW 1/4		40.0	20.0	4.0
Byers 9A	40	1N-4E	2	W 1/2	E 1/2	SW 1/4		40.0	20.0	4.0
Byers 9A	10	1N-4E	2	SE 1/4	NE 1/4	SW 1/4		10.0	5.0	1.0
		1N-4E	2					202.5	101.3	20.3
Byers 9B	20	1N-4E	3	S 1/2	SE 1/4	NE 1/4		20.0	10.0	2.0
Byers 9B	80	1N-4E	3	E 1/2	SE 1/4		Tra I	80.0	40.0	8.0
Byers 9B	10	1N-4E	3	SE 1/4	SW 1/4	SE 1/4		10.0	5.0	1.0
Byers 9B	40	1N-4E	3	W 1/2	W 1/2	SE 1/4		40.0	20.0	4.0
Byers 9B	20	1N-4E	3	E1/2	NW 1/4	SE 1/4	1.0	20.0	10.0	2.0
Byers 9B	10	1N-4E	3	NE 1/4	SW 1/4	NE 1/4		10.0	5.0	1.0
		1N-4E	3			4_2	4	180.0	90.0	18.0
	100						3.C	PINVA		300
Byers 8	160	1N-4E	9	SE 1/4				160.0	80.0	16.0

BYERS TRACT 9 TOTAL

Name	Acres	T-R	Section				Tract Acres	Water Right Acres	Water Right a-
Byers 3	17	1N-4E	10	S2	SW 1/4		17.5	17.5	3.5
Byers 6	41	1N-4E	10	S2	SE 1/4		40.5	10.1	2.0
Byers 7	35	1N-4E	10	SE 1/4			35.4	8.9	1.8
Byers 8	40	1N-4E	10	SW 1/4	SW 1/4		40.0	20.0	4.0
Byers 9C	160	1N-4E	10	NE 1/4			160.0	80.0	16.0
Byers 9D	114	1N-4E	10	S 1/2			114.3	57.1	11.4
		1N-4E	10				407.7	193.6	38.7
Byers 5	39	1N-4E	11	NW 1/4	SW 1/4		39.4	39.4	7.9
Byers 5	10	1N-4E	11	SW 1/4	NE 1/4	SW 1/4	10.0	10.0	2.0
		1N-4E	11				49.4	49.4	9.9
Byers 2	160	1N-4E	15	NW 1/4			160.0	160.0	32.0
Byers 4	160	1N-4E	16	NE 1/4			160.0	160.0	32.0
Byers 1	80	1N-4E	17	W 1/2	SE 1/4		80.0	80.0	16.0
Byers 1	40	1N-4E	17	SW 1/4	NE 1/4		40.0	40.0	8.0
		1N-4E	17				120.0	120.0	24.0

	Tract	Water Right	Water
	Acres	Acres	Right a-f
HICKORY (BYERS) LEASED SUBTOTAL	1439.6	954.2	190.8

656.8

328.4

Name	Acres	T-R	Section				Tract Acres	Water Right Acres	Water Right a-f
Jones 1B	40	2N-3E	36	SW 1/4	SW 1/4		40.0	40.0	8.0
Jones 1B	20	2N-3E	36	W 1/2	SE 1/4	SW 1/4	20.0	20.0	4.0
Jones 1B	10	2N-3E	36	NE 1/4	SE 1/4	SW 1/4	10.0	10.0	2.0
		2N-3E	36				70.0	70.0	14.0
Jones 1A	320	1N-3E	1	E 1/2			320.0	320.0	64.0
Jones 1A	80	1N-3E	1	S 1/2	SW 1/4		80.0	80.0	16.0
Jones 1A	20	1N-3E	1	S 1/2	SE 1/4	NW 1/4	20.0	20.0	4.0
Jones 1A	40	1N-3E	1	NE 1/4	SW 1/4		40.0	40.0	8.0
		1N-3E	1				460.0	460.0	92.0
Jones 2	40	1N-3E	11	SW 1/4	SE 1/4		40.0	40.0	8.0
Jones 2	20	1N-3E	11	W 1/2	NW 1/4	SE 1/4	20.0	20.0	4.0
		1N-3E	11				60.0	60.0	12.0
Jones 1A	160	1N-3E	12	N 1/2	N 1/2		160.0	160.0	32.0

RECEIVE	Tract	Water Right	Water
	Acres	Acres	Right a-f
EAST OF HICKORY (JONES) LEASED SUBTOTAMAR 2 6 2020	750.0	750.0	150.0

		Tract Acres	Water Right Acres	Water Right a-
HICKORY LEASED TOTAL		2189.6	1704.2	340.8
SUMMARY	North Plant Owned	1,501	1,501	280
	South Plant Owned	369	369	74
	Hickory Owned	313	313	63
	Hickory Leased	2,190	1,704	341
	Total Acreage Controlled	4,372	3,887	777
US Silica Total Groundwater Right		- 10.01	Acre-Feet	777



ATTACHMENT B1 US SILICA NORTH PLANT

OWNED ACREAGE
JOHNSTON COUNTY

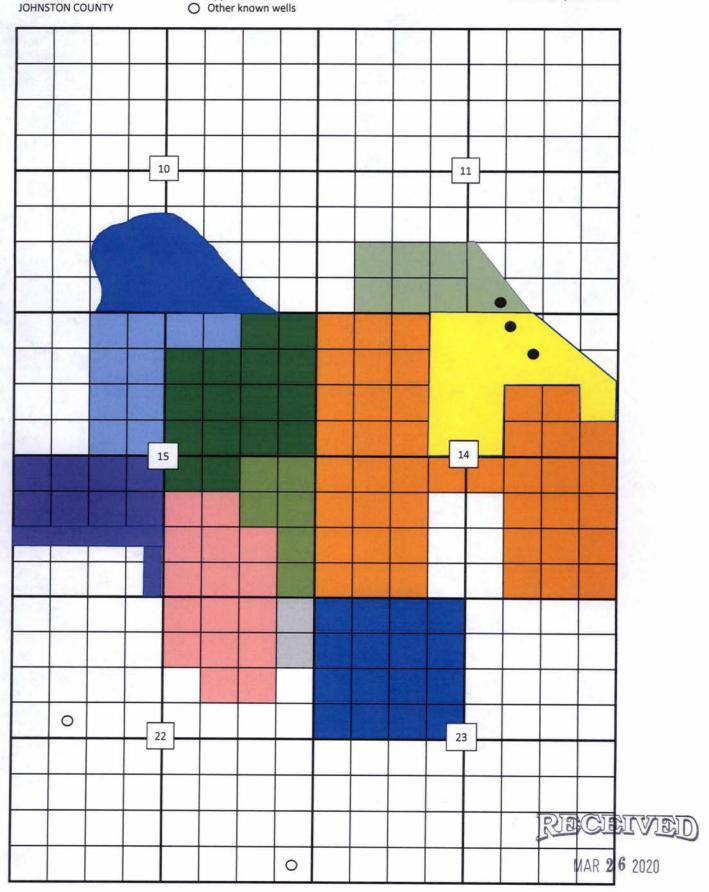


OVERVIEW MAP - NORTH PLANT OWNED ACREAGE

TOWNSHIP 1 SOUTH RANGE 4 EAST

Applicant wellsOther known wells

US SILICA COMPANY PO BOX 36 MILL CREEK, OK 74856



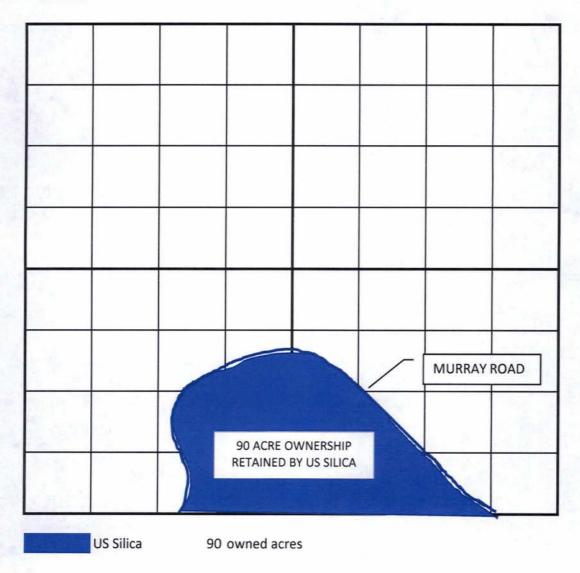
10

T-R

1S-4E

No known wells

Owner US Silica



RECEIVED

11

T-R

1S-4E

Owner

US Silica

Applicant well

US SILICA
COMMERICIAL
WELL ID 160210
355'

Leon Freeze tract

74 owned acres



14

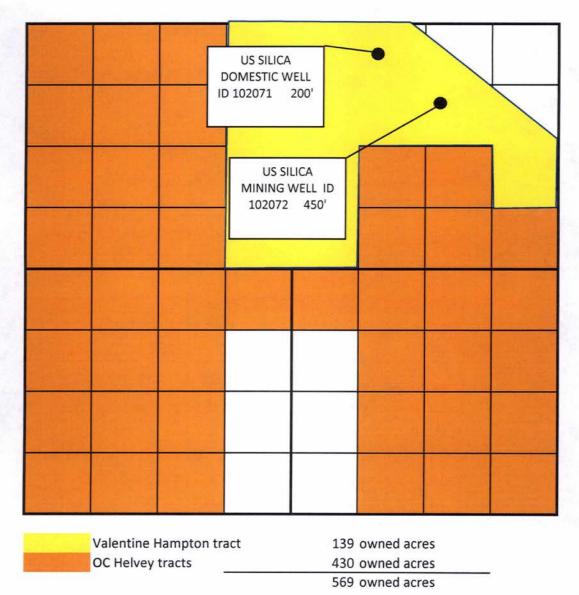
T-R

1S-4E

Owner

US Silica

Applicant wells



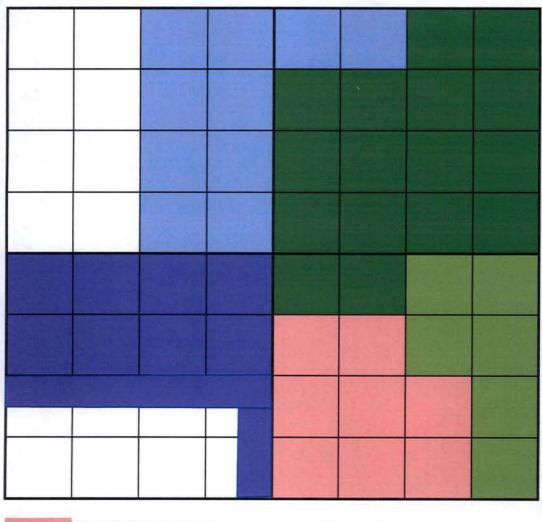
15

T-R

1S-4E

No known wells

Owner US Silica



Tommie Campbell tract
Roy Gist tract
OC Helvey tracts
Leonard Reynolds tract
Rebecca Stinson tract

80 owned acres
100 owned acres
160 owned acres
60 owned acres
108 owned acres
508 owned acres

RECEIVED

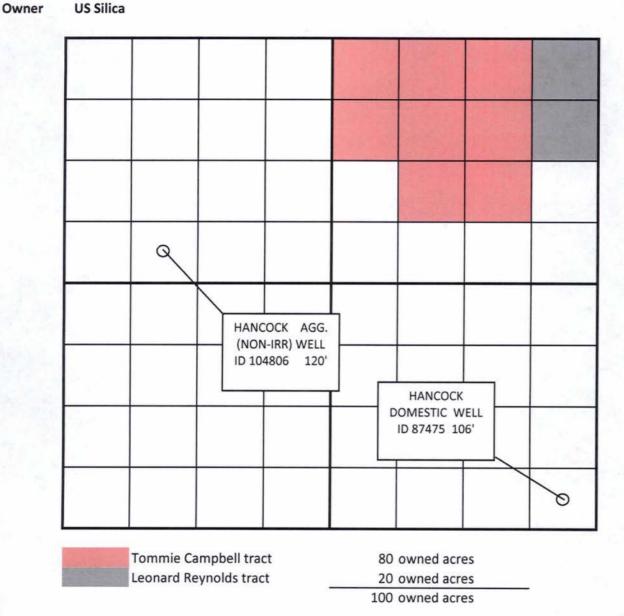
22

T-R

1S-4E

15-4E

O Other known wells



RECEIVED

23

T-R

1S-4E

Owner

US Silica

No known wells

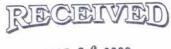
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OC Helvey tract

160 owned acres

US SILICA SOUTH PLANT

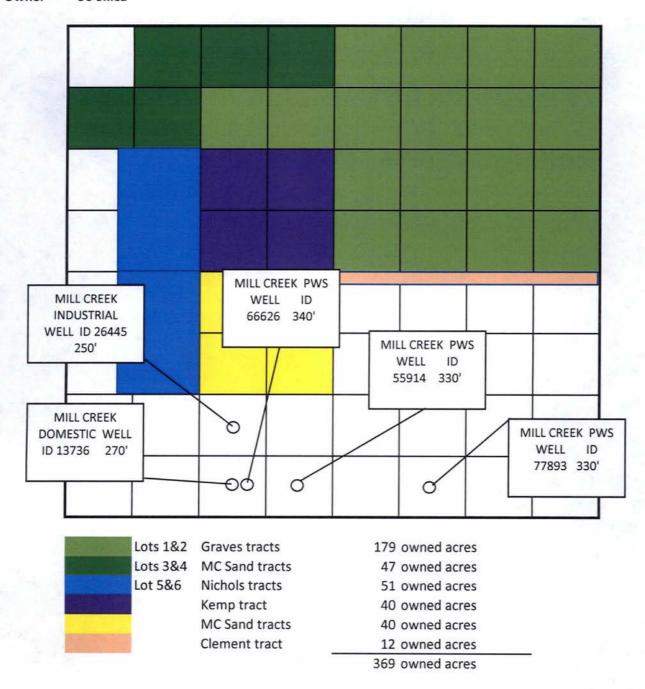
OWNED ACREAGE JOHNSTON COUNTY



Section T-R 6 2S-5E

Owner US Silica

O Other known wells



ATTACHMENT B3 US SILICA HICKORY, OK

OWNED AND LEASED ACREAGE MURRAY COUNTY

US SILICA COMPANY PO BOX 36 MILL CREEK, OK 74856

OVERVIEW MAP - HICKORY OWED AND LEASED ACREAGE
TOWNSHIP 1 NORTH
RANGE 4 EAST
MURRAY COUNTY CENTED MAR 2 6 2010

Oklahoma Water Resources Board

HICKORY TOWN SITE

Owner

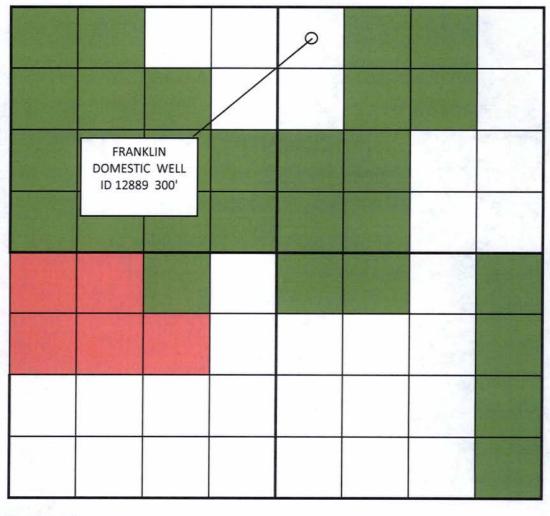
11

T-R

1N-4E

US Silica and Byers

O Other known wells



US Silica owned Byers Lease

280 owned acres 49 leased acres

329 acres

14

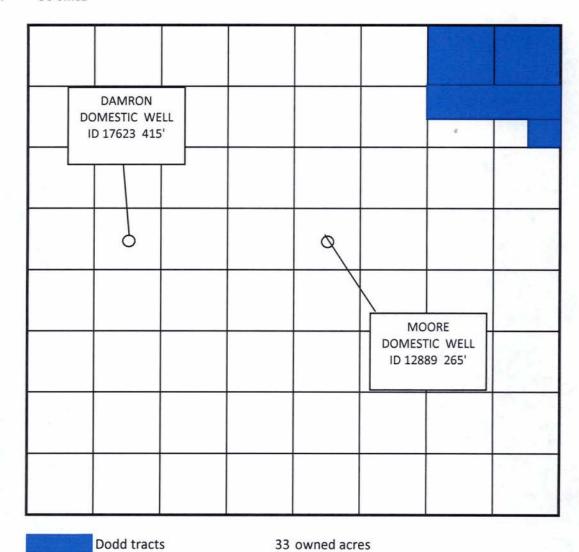
T-R

1N-4E

Owner

US Silica

O Other known wells



Owner

2

T-R

1N-4E

Byers

No known wells

			19 5	
4			3	
			-28	
-				

Byers Leased 50% right

101.3 acre water right

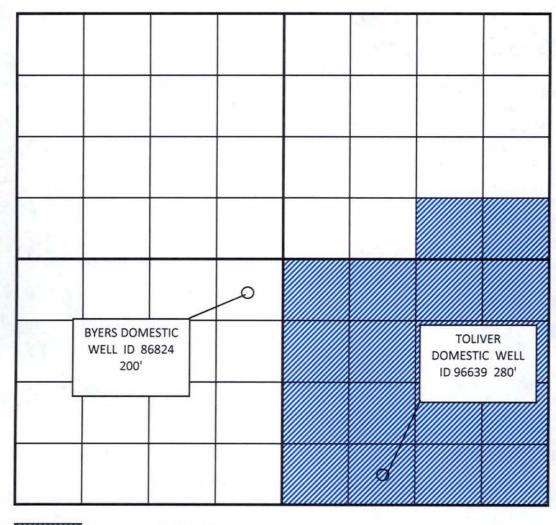


3

T-R Owner 1N-4E

Byers

O Other known wells



Byers Leased 50% right

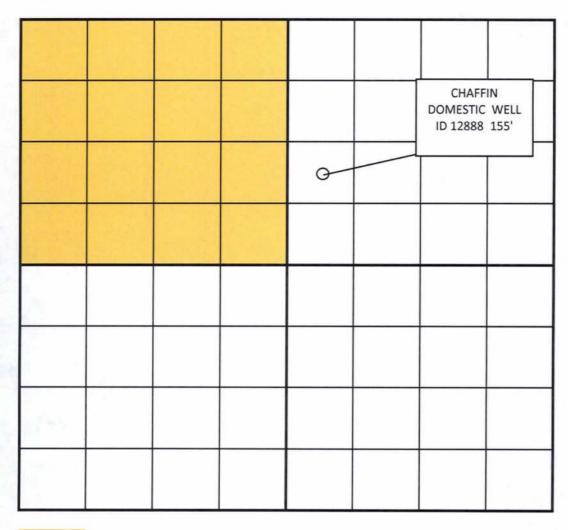
90 acre water right

Section T-R

Owner

9

1N-4E Byers O Other known well



Byers Lease 50% right

80 acre water right



10

T-R

1N-4E

Owner

No known wells

US Silica

4				

Cross-hatched area includes a total of 6 tracts, totaling 408 acres, some with partial right.

Location		Tract Acres	Right Acreage	Water Right	
S2	SW 1/4	17	17	3	100% right
S2	SE 1/4	41	10	2	25% right
SE 1/4		35	9	2	25% right
SW 1/4	SW 1/4	40	20	4	50% right
NE 1/4		160	80	16	50% right
S 1/2		114	57	11	50% right
	-	408	193	39	

15

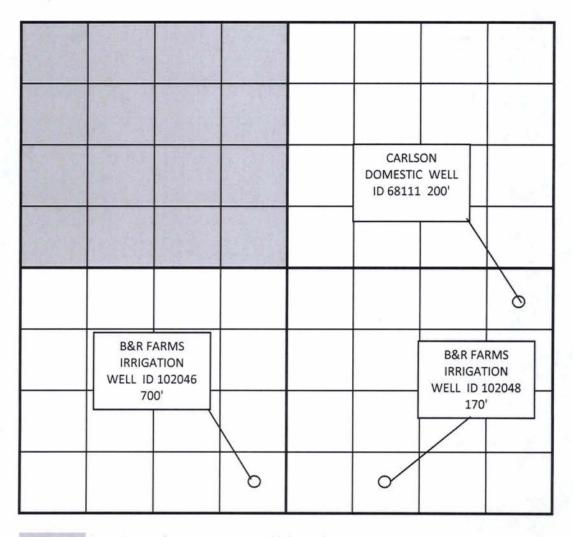
T-R

1N-4E

Owner

Byers

O Other known wells



Byers Leased

160 leased acres



16

T-R

1N-4E

No known wells

Owner

Byers

•			

Byers Leased

160 leased acres

17

T-R

1N-4E

No known wells

Owner

Byers

Byers Leased

p4			

120 leased acres

RECEIVED

ATTACHMENT B4 US SILICA EAST OF HICKORY, OK

LEASED ACREAGE
MURRAY COUNTY



0 TOWNSHIP 1 NORTH TOWNSHIP 2 NORTH US SILICA COMPANY PO BOX 36 MILL CREEK, OK 74856 31 9 7 RANGE 2 EAST RANGE 3 EAST 36 -12 OVERVIEW MAP - LEASED ACREAGE EAST OF HICKORY
TOWNSHIPS 1 NORTH AND 2 NORTH
RANGE 3 EAST
MURRAY COUNTY 35 11

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Section T-R

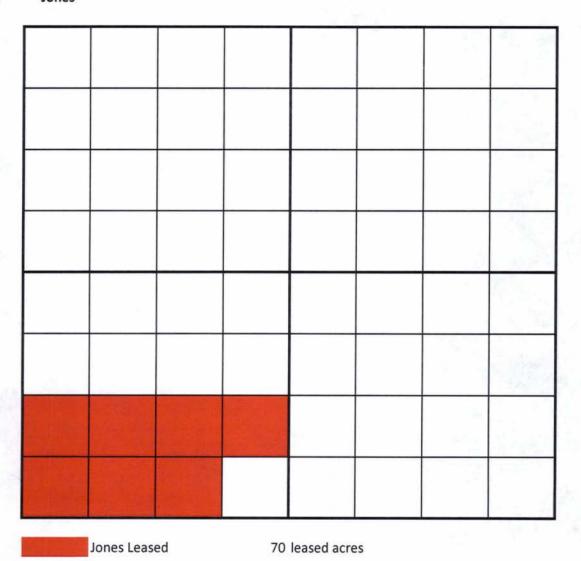
36

2N-3E

No known wells

Owner

Jones



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1

T-R

1N-3E

Owner

Jones

No known wells

	N.			

Jones Leased

460 leased acres



11

T-R

1N-3E

No known wells

Owner

Jones

			38

Jones Leased

60 leased acres



12

T-R

1N-3E

No known wells

Owner

Jones

-				

Jones Leased

160 leased acres

ATTACHMENT C LEASE OF GROUNDWATER RIGHTS HICKORY, OK DAVID BYERS



LEASE OF GROUNDWATER RIGHTS

This Lease of Groundwater Rights ("Lease") is entered into on this 1st day of July, 2015 ("Effective Date"), by and between David Byers, Krista Byers and Ellease Byers, each a resident of the State of Oklahoma (collectively, "Lessor") and U.S. Silica Company, a Delaware corporation with offices at 4800 Oklahoma Highway 1 North, Mill Creek, OK 74856, ("Lessee"). Each of these entities is, at times, referred to individually as a "party," and both are referred to collectively as "parties."

Lessor hereby leases to Lessee, on an exclusive basis, one hundred percent (100%) of the Arbuckle-Simpson Aquifer groundwater rights ("Groundwater Rights"), appurtenant to the property described below, on the following terms and conditions:

1. Property.

The property consists of all property rights to and for the Arbuckle-Simpson Aquifer groundwater which relates to those certain 954.23 acres of real property described in **Exhibit** "A" ("Property"), and all real and personal property rights, appurtenances, permits, authorities, licenses, consents and contracts, if any, pertaining to all such property rights.

2. Lease of Groundwater Rights.

The lease of the Groundwater Rights, as defined above, shall expressly include the right of the Lessee to withdraw and beneficially use the Groundwater Rights pursuant to this Lease.

3. Term; Termination.

(i) <u>Term.</u> This Lease shall commence on the Effective Date and continue for a period of ten (10) years thereafter ("Initial Term"), and shall automatically renew for additional one (1) year terms ("Renewal Terms") unless sooner terminated in accordance herewith (the Initial Term and the Renewal Terms are, collectively, the "Term").

(i) Termination for Convenience.

- (a) By Lessee: At any time during the Term, Lessee may terminate this Lease for any reasons whatsoever, in whole or in part, upon six (6) months written notice, in which case an appropriate proration of the Lease Payments (defined hereinafter) shall be made accordingly.
- (b) By Lessor: Following the Initial Term, Lessor may terminate this Lease, in whole or in part, for any reason whatsoever upon, twelve (12) months written notice, in which case an appropriate proration of the Lease Payments (defined hereinafter) shall be made accordingly.
- (ii) <u>Termination for Cause</u>. If for any reason Lessor fails to comply with any of the provisions of this Lease, Lessee, at its election, may exercise all rights which may be available to it at law or in equity, including termination of this Lease. If Lessee fails to comply with any provision of this Lease and such failure continues for a period of thirty (30) days after receiving written notice of such failure from Lessor, Lessor may as its sole and exclusive remedy

terminate this Lease and receive the Lease Payments which are due and payable and have accrued through that date.

4. Lease Payment.

Subject to the terms of this Lease, Lessee agrees to pay to Lessor the sum of forty-three dollars (\$43) per acre per year during the first twelve (12) months of the Lease, which amount shall increase by one dollar (\$1) per acre per year for each subsequent twelve (12) months of the Initial Term but shall remain fixed at fifty-two dollars (\$52) per acre per year during the Renewal Term ("Lease Payments"). The Lease Payments shall be payable in two (2) equal installments on January 1 and July 1 of each calendar year.

Defense of Rights.

Lessee shall have the right to initiate and prosecute any proceedings relating to the Groundwater Rights and, at its election, the Property as may be necessary for the protection of the Groundwater Rights, including but not limited to protecting, defending, or preserving the rights to withdraw groundwater from the Arbuckle-Simpson Aquifer and place it to beneficial use. If Lessee elects to act with respect to the Property, Lessee shall give Lessor written notice of such election; provided, however, in no event shall Lessee be required to give notice to Lessor of its actions with respect to the Groundwater Rights leased hereunder. If Lessee elects to act with regard to the Property or Groundwater Rights, Lessor shall cooperate with Lessee's efforts in connection therewith. Lessor shall not take any action or omit to take any actions which will adversely affect the Property or Groundwater Rights. If required by law, Lessee may take any such action in the name of Lessor. Unless otherwise required by law, Lessee shall not be required to take any such action with respect to the Property or Groundwater Rights on behalf of Lessor. Lessee shall in no event be deemed to be the agent of Lessor or as having any duty or responsibility to Lessor or to act on behalf of Lessor. To the extent Lessee elects to act in connection with the Property, Lessor appoints Lessee as Lessor's attorney-in-fact to take such action.

6. Continued Operation.

From the date of execution of this Lease by Lessor and continuing thereafter during the Term of this Lease, Lessor shall not take any actions (or omit to take any actions) which will harm or diminish the Property or Groundwater Rights. During the Term of this Lease, Lessor shall have a continuing duty to furnish to Lessee notice of all matters or actions related to or affecting the Groundwater Rights, including, without limitation, actual or threatened litigation or administrative actions, within five (5) business days of the date Lessor becomes aware of such matters or actions. Lessor agrees to furnish to Lessee information concerning and copies of all documents pertaining to such matters or actions within five (5) business days of the date that Lessee requests such information or documents. Lessor additionally agrees and acknowledges that it has leased the Groundwater Rights to Lessee and that Lessor shall not transfer the Property or Groundwater Rights, nor shall Lessor make any withdrawals of any Groundwater Rights leased hereunder, nor otherwise authorize or allow any other third-party to withdraw such

groundwater. Any such unauthorized withdrawals shall constitute a violation of this Lease, and the applicable rules of Lessee.

7. Quiet Enjoyment.

Lessor does hereby warrant and represent to Lessee that it has good title to the Property and Groundwater Rights leased to Lessee hereunder and does hereby covenant to provide to Lessee quiet enjoyment, without restriction or limitation, of the Property and Groundwater Rights during the full Term of this Lease, subject only to any matters of record in the Official Public Records of Murray County, Oklahoma, as of the Effective Date hereof.

8. Proceeds from Awards.

Lessor assigns to Lessee all interest of Lessor in and to any condemnation awards or insurance proceeds which relate to Lessee's interest in the Groundwater Rights which are allocated to the value of Lessee's interest in this Lease.

9. Cooperation.

Lessor will use its best efforts, take such actions, and execute and deliver such documents Lessee determines necessary to fully vest Lessee with the Groundwater Rights and make effective all of the terms of this Lease.

10. Assignability.

Lessee shall have the right to sublease or assign this Lease, and shall give to Lessor prompt written notice of such sublease or assignment.

11. Notices.

Any notices to be given hereunder shall be given by placing the notice in the United States mail, certified or registered, properly stamped and addressed to the address shown below or such other addresses as the respective party may direct in writing to the other, by overnight delivery service, or by personal delivery to such address. Notice shall be deemed effective upon such placing in the mail, on the next business day following delivery and acceptance for next day delivery by any overnight delivery service, or upon actual delivery if by personal delivery:

Lessor:

David Byers 3642 Byers Road Sulphur, OK 73086

Lessee:

RECEIVED

U.S. Silica Company

8490 Progress Drive

Suite 300 Frederick, MD 21701 Attn. Legal Department

12. Taxes.

All taxes, charges, or assessments upon the Property and Groundwater Rights shall be the continuing responsibility of Lessor. Lessee shall not be liable for any taxes, charges, or assessments upon the Property or Groundwater Rights.

13. Liens.

Lessor and Lessee shall promptly pay when due all items for which they are responsible which may result in the placement of a lien on the Property or Groundwater Rights. If Lessor or Lessee fails to pay any such item, including but not limited to any tax, charge or assessment, or any mechanic's or materialmen's expenses, or if a lien is placed upon the Property or Groundwater Rights, the non-defaulting party shall have the right to make such payment and the defaulting party hereby covenants to reimburse the non-defaulting party, upon demand, for any amount so expended or paid, with interest thereon at the highest legal rate per annum from the date of such payment until the date of such reimbursement.

14. Waiver.

The failure on the part of either party to require the performance by the other of any portion of this Lease shall not be deemed a waiver of, or in any way affect that party's rights to enforce such provision. Any waiver by either party of any provision of this Lease shall not be a waiver of any other provision hereof.

15. Severability.

The invalidity or unenforceability of any provision of this Lease shall not affect the validity or enforceability of any other provision of this Lease.

16. Governing Law.

This Lease shall be governed by and construed in accordance with the laws of the State of Oklahoma, and the obligations, rights, and remedies of the parties hereunder will be determined in accordance with such laws without reference to the laws of any other state or jurisdiction, except for applicable federal laws, rules, and regulations.

17. Binding Effect.

This Lease shall be binding upon and inure to the benefit of the parties and their respective successors and assigns.

18. Authority.

Each of the persons signing on behalf of Lessor and Lessee hereby confirm that they have the authority to execute this Lease on behalf of the party indicated by their signature and have the authority to bind such party thereto.

19. Survival.

Except as set out herein, all agreements and representations in this Lease shall survive the end of the Term.

20. Force Majeure.

If Lessee is denied its use of all or a part of the Groundwater Rights by reason of any laws, regulations, or governmental action or other acts outside of the control of Lessee, then Lessee and Lessor shall be excused from their obligations hereunder for so long as these circumstances exist.

21. Further Assurances.

Lessor and Lessee shall take all further actions and shall execute and deliver to the other any other document or instrument which Lessee determines to be necessary or useful to fully carry out the transactions evidenced by this Lease, including any amendments to the Permit, in conformance with applicable Lessee rules, or any documentation required by Lessor in order to evidence the termination of Lessee's interest in the Groundwater Rights upon the termination of this Lease. In addition, Lessor agrees to amend this Lease in any manner necessary to cause this Lease to be in compliance with Lessee rules. Lessee shall have the authority to file a Memorandum of Lease of public record to reflect its interest in the Property and Groundwater Rights as set out under the terms of this Lease. Lessor agrees to execute any such form of Memorandum of Lease provided by Lessee.

22. Attorneys Fees.

If any action at law or in equity is brought to enforce or interpret a provision of this Lease, the prevailing party shall be entitled to recover from the other party reasonable attorneys' fees, costs and other necessary litigation disbursements in addition to any relief to which it may be entitled.

23. Entire Agreement.

This Lease contains all agreements between the parties and any agreement not contained herein shall not be recognized by the parties. The captions used herein are for convenience only and shall not be used to construe this Lease. Words of gender shall be construed to include any other gender, and words in the singular number shall include the plural and vice versa unless the context requires otherwise.

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24. Counterparts.

This Lease may be executed by the parties in any number of counterparts, each of which when so executed and delivered shall be deemed an original instrument, but all such counterparts together shall constitute but one and the same instrument.

SIGNATURES ON FOLLOWING PAGE

RECEIVED

IN WITNESS WHEREOF, Lessor and Lessee have executed and delivered this Lease as of the Effective Date.

LESSOR:

David Byers

Krista Buero

Ellerse Buyers

Ellease Byers

LESSEE:

U.S. SILICA COMPANY

By: S

Name: Brygn

Title: President and CED

Reviewed by U.S. Silica Legal Department

Initial

Date

RECEIVED

EXHIBIT A

PROPERTY

Parcel #1

30 , A

The W½ of the SE¼ and the SW¼ of the NE¼ all in Section 17, Township 1 North, Range 4 East, Murray County, Oklahoma, containing 120 acres, more or less.

· 100% of ground water rights.

Parcel #2

160

The NW' of Section 15, Township 1 North, Range 4 East, Murray County, Oklahoma, containing 160 acres, more or less.

100% of ground water rights.

Parcel #3

A portion of the S½ of the SW¼ not previously conveyed in Section 10, Township 1 North, Range 4 East; containing 17.48 acres, more or less.

· 100% of ground water rights.

Parcel #4

The NE½ of Section 16, Township 1 North, Range 4 East, Murray County, Oklahoma, containing 160 acres, more or less.

100% of ground water rights.

Parcel #5

The Northwest Quarter of the Southwest Quarter (NW/4 SW/4) and the Southwest Quarter of the Northeast Quarter of the Southwest Quarter of Section Eleven (11), Township One (1) North, Range Four (4) East of the Indian Base and Meridian, in Murray County, Oklahoma, LESS AND EXCEPT a tract of land lying in the NW/4 SW/4, being more particularly described as follows: Commencing at the Northwest Corner of said NW/4 SW/4; thence S 0°12'03"W along the West line of said Section 11, a distance of 204.07 feet to the Point of Beginning; thence S 86°54'45"E, a distance of 270.34 feet; thence S 0°12'03"W and parallel to the West line of said Section 11, a distance of 91.39 feet; thence N 89°47'57"W and perpendicular to said West line, a distance of 270.00 feet; thence N 0°12'03"E, a distance of 150.00 feet to the Point of Beginning; said described tract containing 0.61 Acres, more or less.

• 100% of ground water rights.

50.61

Parcel #6

A tract of land lying in the S/2 SE/4 of Section 10, Township 1 North, Range 4 East, Murray County, Oklahoma, and being more particularly described as follows: Commencing at the Southwest corner of the S/2 SE/4 of said Section 10, said point being the POINT OF BEGINNING; thence N 0° 09'51" E along the West line of said S/2 SE/4, a distance of 994.39 feet; thence S 75° 33'30"E, a distance of 1732.30 feet; thence S 44° 29'17"E, a distance of 331.52 feet; thence N 64° 21'59"E, a distance of 570.42 feet; thence S 88° 05'40" E, a distance of 209.88 feet to a point on the East line of said Section 10; thence S 0° 12'03"W along the East line of said Section 10, a distance of 569.34 feet to the Southeast corner of said Section 10; thence N 89° 55'11" W along the South line of said Section 10, a distance of 2634.78 feet to the Point of Beginning; said described tract containing 40.52 acres, more or less.

One fourth (¼) of ground water rights (i.e., 10.13 acres).

Parcel #7

A tract of land lying in the SE¼ of Section 10, Township 1 North, Range 4 East, Murray County, Oklahoma, and being more particularly described as follows: Commencing at the Northeast corner of the SE¼ SE¼ of said Section 10, said point being the POINT OF BEGINNING; thence S 0° 12'03" W along the east line of said Section 10, a distance of 754.03 feet; thence N 88° 05'40" W along the existing fence line, a distance of 290.88 feet to a fence corner; thence S 64° 21'59" W, a distance of 570.42 feet to a fence corner; thence N 44° 29'17" W, a distance of 331.52 feet to a fence corner; thence N 75° 33'30" W, a distance of 1151.65 feet to a fence corner; thence N 8° 58'14" E, a distance of 70.55 feet to a fence corner; thence S 81° 27'53" E along the existing fence, a distance of 341.72 feet; thence N 34° 13'11" E, a distance of 576.21 feet; thence N 91° 14'06" E, a distance of 349.15 feet; thence S 89° 48'30" E, a distance of 687.58 feet to a point of the west line of the E½ NE½ SE½ of said Section 10; thence S 89° 54'46" E, a distance of 658.91 feet to the POINT OF BEGINNING; said described tract containing 35.38 acres, more or less.

Twenty-five percent (25%) of ground water rights (i.e., 8.85 acres).

Parcel #8

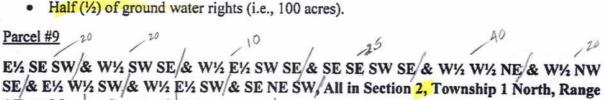
The Southeast Quarter (SE¼) of Section Nine (9), Township One (1) North, Range Four (4) East of the Indian Base and Meridian, containing One Hundred Sixty (160) acres, more or less, according to the United States Government Survey thereof.

AND

The Southwest Quarter (SW¼) of the Southwest Quarter (SW¼) of Section Ten (10), Township One (1) North, Range Four (4) East of the Indian Base and Meridian, Murray County, State of Oklahoma.

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Page 9 of 10



4 East, Murray County, Oklahoma.

S½ SE NE & E½ SE & SE SW SE & W½ W½ SE & E½ NW SE & NE SW SE All in Section 3, Township 1 North, Range 4 East, Murray County, Oklahoma.

AND 180

NE% of Section 10, Township 1 North, Range 4 East, Murray County, Oklahoma.

AND 16

A tract of land lying in the South Half (S1/2) of Section 10, Township 1 North, Range 4 East, Murray County, Oklahoma, being more particularly described as follows: Commencing at the center of said Section 10 (NE corner of SW1/4), said point being the Point of Beginning; thence S 89°54'20"E, along the north line of the SE¼ of said Section 10, a distance of 1977.36 feet to the Northeast Corner of the W1/2 NE1/4 SE1/4 of said Section 10; thence S 0°11'30"W, along the east line of the W1/2 NE1/4 SE1/4, a distance of 956.81 feet; thence N 89°48'30"W, a distance of 687.58 feet; thence S 9°14'06"W, a distance of 349.15 feet; thence S 34°13'11"W, a distance of 576.21 feet; thence N 81°27'53"W, a distance of 341.72 feet; thence S 8°58'14"W, a distance of 70.55 feet; thence N 75°33'30" W, a distance of 580.65 feet to a point on the east line of the SE1/4 SW1/4 of said Section 10; thence N 89°54'46"W and parallel to the north line of SE¼ SW¼ of said Section 10, a distance of 1317.71 feet to a point on the west line of the SE1/4 SW1/4 of said Section 10; thence N 0°08'45"E, a distance of 329.31 feet to the Northwest Corner of the SE' SW' of said Section 10; thence continuing N 0°08'45"E, a distance of 1323.86 feet to the Northwest Corner of the NE1/4 SW1/4 of said Section 10; thence S 89°54'20"E, a distance of 1318.24 feet to the Point of Beginning; said described tract containing 114.26 acres, more or less.

• Half (½) of ground water rights (i.e., 328.38 acres).

PARCEL 9 TOTAL 656.8 507, = 328.4

RECEIVED

ATTACHMENT D LEASE OF GROUNDWATER RIGHTS EAST OF HICKORY, OK FOB JONES

MEMORANDUM OF LEASE

THIS MEMORANDUM OF LEASE was entered into on the day of July, 2015 by and between Fob F. Jones, Lessor, whose address is 1010 W. 2nd Street, Sulphur, Oklahoma 73086 (collectively referred to as "Lessor") and U.S. Silica Company, a Delaware corporation, Lessee, whose address is 8490 Progress Dr., Ste 300, Frederick, Maryland 21701, ("Lessee") Fob F. Jones state that he is dealing with his sole and separate property.

- The real property covered by the Lease is situated in Murray County, State of Oklahoma, and is more particularly described in Exhibit A attached hereto ("Property).
- By the terms of the Lease, the Lessor demises, grants and leases the "Groundwater Rights" exclusively to Lessee, its successors and assigns, for the purposes of beneficially utilizing the groundwater rights pursuant to the Lease.
- The term of the Lease commences on July 1, 2015 and terminates ten (10) years thereafter.
 Lessee and Lessor may extend and renew the term of the Lease for one (1) year renewal terms upon the expiration of the primary Lease period.
- 4. This Memorandum is executed and filed for the purpose of providing notice of the Lease only and is not intended to enlarge, diminish or otherwise affect the rights and obligations of the parties to Lease.

[The rest of this page has been left blank intentionally.]

Biecienaed

IN WITNESS WHEREOF, the parties have executed this Memorandum of Lease on the day and year first above written.

LESSOR:

LESSEE:

U.S. SILICA COMPANY

FOB F. JONES

TO THE TOTAL STATE OF THE STATE

Reviewed by U.S. Silica Legal Department

Initial

Date

EXHIBIT A

PROPERTY

	TOTAL 626	PROPERTY		
	Parcel #1	20	Wa.	TOTAL 46
	13"	180 120	40	
	N/A N/A of Section 12	W¼ and the S½ SE¼ NW¼ an all in Township 1 North, Range	d the NE' SW' of Se	ction 1 and the
. 0		in in Township I North, Kange	5 East, Murray Count	y, Oklahoma.
60	AND -70711-70	-20	_10	TOME 70
	The SW¼ SW¼ and t	he W¼ SE¼ SW¼ and the NE	4 SE'4 SW'4, Section 3	6. Township 2
		Jurray County Oklahama	the local party states and the state of the	,

100% of ground water rights (i.e., 690 acres).

Parcel #2 TOPM GO 120

The SW' SE' and W' NW' SE', Section 11, Township 1 North, Range 3 East, Murray County, Oklahoma.

100% of ground water rights (i.e., 60 acres).

MAR 2 6 2020

Oklahoma Water Resources Board

	TE OF OKLAHOMA)) ss: NTY OF MURRAY)	
Jones	This foregoing instrument was acknowledged before me this 294 days.	y offun 2015 by Fob F. W Clary RY PUBLIC
	ommission Expires: 05/00/2017 ommission Number: 0900 3943	OFFICIAL SEAL LACI CLARY Notary Public Oklahoma Commission sosooss4s My Comm. Exp. 05-08-2017
COUNT	OF MARYLAND) ss: TY OF FREDERICK This foregoing instrument was acknowledged before me this 13 day YAN A. SHINN as PRESIDENT & CEO of U.S. SILICA COMPAN	y of <u>July</u> 2015
My Com	nmission Expires: 11/5/20/8 nmission Number:	A Louchs

KARRIE L. LOUCKS
Notary Public-Maryland
Washington County
My Commission Expires