

Corporate Environmental Affairs

June 23, 2015

Oklahoma Water Resources Board
3800 N. Classen
Oklahoma City, OK 73118
(405) 530-8800

**RE: Consumptive Water Use Report – Quarter 2, 2015
Mine L.E.-1565 – Unimin Corporation – Roff Facility**

Dear Sir or Madam:

Enclosed please find Unimin's consumptive water use report for the second quarter of 2015. As noted on the attached worksheet, the plant remains below our allocated equal proportionate share.

If you have any questions or require any additional information, please contact myself or Don Russell at (580) 456-7772.

Respectfully,

A handwritten signature in black ink, appearing to read "R. Amiri Alexander". The signature is fluid and cursive, with a long horizontal stroke at the end.

R. Amiri Alexander
Quality Control / Mine Supervisor

Attachments

CC: Plant
IRO

Consumptive Use of Pitwater Worksheet

Enter Values in Yellow

Pit Groundwater Volume

- 1 Total volume of water pumped from the producing mine pit(s)
- 2 Volume of precipitation that falls onto the surface of water in the producing mining pit(s)
- 3 Portion of total precipitation that flows over the land surfaces that drains into the mine pit water
- 4 Other non-pit waters pumped from the producing mine pit
- 5 Add lines 2 through 4
- 6 Pit Groundwater Volume (Line 1 + Line 5)

Amount (gallons)

108,120,500
53,036,240
0
0
53,036,240
55,084,260

Area of Pit: 54.5 (acres) Rainfall: 35.84 (inches)

Defined Elements of Consumptive Use

- 7 Volume of pit water that is driven off (by drying) the mined material transported off the mine site
- 8 Volume of pit water that is carried away with the mined material transported off the mining site (shipped)
- 9 Volume of pit water that evaporates from the producing mine pit, process water ponds, and lined ponds (excluding structures used for augmentation)
- 10 Volume of pit water that is used for other beneficial uses off the mine site
- 11 Defined Elements of Consumptive Use of Pit Groundwater (add Lines 7 through 10)

Amount (gallons)

2,881,054
0
557,767
3,438,821

Tons Mined: 240,568 % Moisture: 5.0

ASHRAE Evaporation Model

A: 95 (m/hr)
B: 37.4 (ft-hq)
V: 5
Pw: 0.69 (in-hq)
Pa: 0.522 (ft/h)
Hr: 970.4 (ft/h)
Evap Area: 10 (acre)

Pit Groundwater Balance

- 12 Line 6 minus Line 11
- 13 Groundwater Augmentation (Volume of pit groundwater returned to the groundwater basic or sub basin)
- 14 Stream Augmentation (Volume of pit groundwater discharged to a definite stream, during flow conditions that are less than or equal to 50% exceedance or median historic flows.
- 15 Precipitation & Run-off (Volume of precipitation and surface run-off into a recharge pit or holding pond used for augmentation)
- 16 Additional Discharge (Volume of pit groundwater discharged to a definite stream, not meeting stream augmentation credit criteria)
- 17 Recycled Pit Groundwater (Volume of pit groundwater returned to a mine pit or holding basin not included on lines 7 through 10)
- 18 Other Non-Consumptive Losses (Including pit groundwater returned to the land surface from which surface run-off flows into a mine pit, and other losses not included in lines 7 through 10)
- 19 Add lines 13 through 18
- 20 Other Consumptive Use (adjusted) Line 12 minus 19

Amount (gallons)

51,645,439
0
0
0
0
0
0
0
0
51,645,439

CREDITS

Total Reported Consumptive Use Of Pit

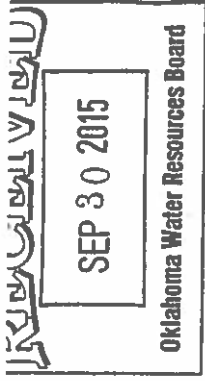
21 Total Reported Consumptive Use Of Pit (add Line 11 and Line 20)

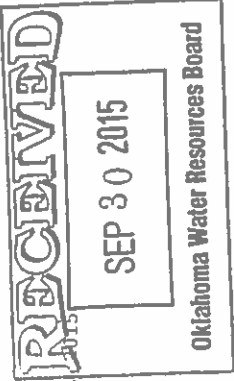
Amount (gallons)

55,084,260

Facility's Equal Proportionate Share (EPS)

62,693,815 at 0.2 acre-feet for 962 acres





Historical Operations Report

Roff, Oklahoma

Week 14 of 2015 to Week 26 of 2015

		----- Week Range -----		----- Year To Date -----	
	Actual	Last Yr	%	Actual	Last Yr
Shipments					
FINE					
Bulk	69,366.23	85,932.08	81%	155,308.36	176,440.19
Trucks	116,027.46	132,004.44	88%	238,776.20	248,636.44
Subtotal:	185,393.69	217,936.52	85%	394,084.56	425,076.63
COARSE					
Bulk	12,949.73	6,525.58	198%	22,381.77	13,856.78
Trucks	20,869.78	25,199.77	83%	48,295.87	51,290.80
Subtotal:	33,819.51	31,725.35	107%	70,677.64	65,147.58
Subtotal:	0.00	0.00	0%	0.00	0.00
Subtotal:	0.00	0.00	0%	0.00	0.00
Subtotal:	0.00	0.00	0%	0.00	0.00
Total:	219,213.20	249,661.87	88%	464,762.20	490,224.21

Product Inventory

	Ending	Start	Ending	Start
FINE	1,324.35	1,457.05	1,324.35	1,162.04
COARSE	759.23	894.76	759.23	735.87

Product Produced

FINE	185,260.99	217,868.94	85%	394,246.87	425,095.33
COARSE	33,683.98	31,976.91	105%	70,701.00	65,390.14
Total:	218,944.97	249,845.85	88%	464,947.87	490,485.47

Production

TONS MINED	240,568.00	242,755.00	99%	503,489.00	513,865.00
TONS PROCESSED	216,510.00	218,480.00	99%	453,138.00	462,479.00
TONS WET PRODUCED	216,510.00	218,480.00	99%	453,138.00	462,579.00
TONS DRIED	236,839.00	255,796.00	93%	485,729.00	501,257.00
TONS DRY PRODUCED	218,973.00	252,322.00	87%	464,365.00	494,969.00
TONS LOADED	228,030.00	249,414.00	91%	466,918.00	491,186.00
TONS PRODUCED	217,973.00	252,322.00	86%	463,365.00	494,969.00
TONS BULK PRODUCED	217,973.00	252,322.00	86%	463,365.00	494,969.00

Process Inventory

	Ending	Start	Ending	Start
DAMP STOCKPILE	14,286.00	34,615.00	14,286.00	41,500.00
DRY STOCKPILE	2,083.58	2,351.81	2,083.58	1,897.91

Dumped Tons

Unifrac 4070	5,510.00	3,571.70	154%	10,779.74	6,774.07
Total:	5,510.00	3,571.70	154%	10,779.74	6,774.07

SEP 30 2015

Oklahoma Water Resources Board

MESONET CLIMATOLOGICAL DATA SUMMARY									
		April 2015		Time Zone: Midnight-Midnight CST					
(ADAX) Ada		Nearest City: 2.0 NNE Ada		County: Pontotoc					
Latitude: 34-47-54		Longitude: 96-40-08		Elevation: 968 feet					
DAY	TEMPERATURE (F) MAX MIN AVG DEWPT	DEG DAYS HDD CDD	HUMIDITY (%) MAX MIN AVG	RAIN (in)	PRESSURE (in) STN MSL	WIND SPEED (mph) DIR AVG MAX	SOLAR (MJ/m2)	4" SOIL TEMPERATURES SOD BARE MAX MIN	
1	78 54 66.7 59.9	0 1	100 44 80	0.78	28.80 29.83	S 9.3 45.6	13.07	63.5 65.8 70 62	
2	84 66 73.9 64.2	0 10	87 52 73	0.00	28.73 29.76	S 13.2 28.7	16.62	65.3 67.1 72 63	
3	73 46 61.5 47.4	5 0	89 41 61	0.00	29.01 30.05	N 15.0 36.4	20.81	65.2 64.2 67 57	
4	66 37 52.7 28.7	14 0	83 16 44	0.00	29.26 30.31	SSE 5.6 16.0	26.48	60.9 60.4 71 52	
5	54 47 50.4 46.3	15 0	100 45 88	0.17	28.97 30.01	SSE 8.9 25.8	3.38	57.9 57.1 60 56	
6	80 53 66.4 61.3	0 1	100 61 86	0.02	28.81 29.84	SSE 10.5 27.2	13.48	60.4 61.2 68 56	
7	82 66 73.0 65.1	0 9	92 58 77	0.00	28.84 29.87	S 11.5 27.1	13.05	64.5 66.1 71 62	
8	77 67 70.9 64.8	0 7	90 66 81	0.00	28.79 29.82	S 13.5 48.5	11.05	65.3 66.8 71 64	
9	82 53 69.9 54.5	0 2	89 32 61	0.00	28.82 29.85	S 11.9 29.7	19.18	66.5 69.0 77 64	
10	70 40 55.9 38.0	10 0	84 30 54	0.00	29.12 30.16	N 6.2 22.7	26.99	64.2 66.1 76 57	
11	74 49 61.8 41.8	4 0	88 24 52	0.00	29.05 30.08	SE 6.9 22.9	23.96	64.2 67.4 77 60	
12	78 59 67.4 57.2	0 3	91 56 70	0.00	28.86 29.90	SSE 9.4 22.2	14.93	64.9 68.6 74 63	
13	68 54 60.0 55.2	4 0	98 64 85	2.11	28.95 29.99	NNE 12.5 37.9	4.98	63.7 64.5 69 59	
14	55 49 52.3 49.5	13 0	99 66 91	0.30	29.03 30.07	NNE 8.2 21.9	5.68	59.7 58.1 60 56	
15	69 52 58.7 53.5	4 0	100 59 84	0.00	28.92 29.95	SE 4.7 17.4	18.26	62.0 62.0 69 57	
16	76 53 64.9 58.2	1 0	98 62 80	0.00	28.93 29.96	SE 7.3 22.0	23.40	64.0 64.2 71 57	
17	76 55 66.1 58.9	0 1	99 53 79	0.29	28.94 29.97	SE 5.4 26.2	17.73	66.2 66.4 72 61	
18	79 56 66.5 57.9	0 2	99 49 76	0.17	28.82 29.85	SSE 4.6 17.0	23.34	67.8 68.4 76 62	
19	71 46 59.4 51.1	7 0	100 42 76	0.00	28.74 29.76	NNW 6.8 29.4	19.32	66.7 65.5 71 60	
20	67 43 53.5 37.8	10 0	94 27 61	0.00	28.94 29.97	NW 5.5 22.0	28.11	64.3 61.2 69 54	
21	73* 47* 60.4* 45.3*	5* 0*	91* 34* 60*	0.02*	28.91* 29.94*	S* 7.5* 23.7*	24.58*	64.2* 62.7* 71* 57*	
22	72 51 58.4 54.4	4 0	98 65 87	0.36	28.89 29.92	NNE 5.4 24.2	13.99	63.8 62.0 68 58	
23	65 55 60.6 57.7	5 0	97 85 90	0.01	28.89 29.92	SE 6.7 23.3	5.43	63.5 62.0 64 60	
24	65 58 61.2 60.3	4 0	100 90 97	0.39	28.73 29.76	SSE 11.3 26.8	4.53	63.2 62.2 64 61	
25	83 58 68.5 52.9	0 5	97 31 62	0.00	28.61 29.63	SW 7.1 18.6	28.56	66.0 65.7 74 58	
26	80 54 66.2 58.5	0 2	98 50 78	0.51	28.68 29.71	NE 5.5 24.1	22.98	67.8 66.9 75 59	
27	60 49 54.8 52.2	11 0	97 75 91	0.37	28.82 29.86	NE 8.8 25.9	6.13	64.9 62.4 66 58	
28	61 44 51.9 47.2	13 0	97 56 85	0.03	29.04 30.08	NNE 7.5 18.6	10.90	61.0 58.1 62 56	
29	75 43 59.2 45.2	6 0	97 30 66	0.00	28.97 30.00	NNW 4.9 21.0	26.98	62.7 60.4 69 52	
30	78 46 62.6 48.9	3 0	97 30 67	0.00	28.94 29.97	NW 2.7 13.6	26.82	65.6 64.2 73 55	
	72* 52* 61.8* 52.5*	<- Monthly Averages ->			28.89* 29.93*	SSE* 8.1* 48.5*	17.16*	64.0* 63.9* 70* 59*	
Temperature - Highest: 84* Lowest: 37*		Degree Days - Total HDD: 135* Total CDD: 44*		Number of Days With: Tmax > 90: 0* Tmax > 32: 0* Tmin < 32: 0* Tmin < 0: 0*		Rainfall > 0.01 inch: 14* Rainfall > 0.10 inch: 10* Avg Wind Speed > 10 mph: 8* Max Wind Speed > 30 mph: 4*			
Rainfall: Monthly Total: 5.53* in. Greatest 24 Hr: 2.11* in.		Humidity - Highest: 100* Lowest: 16*							

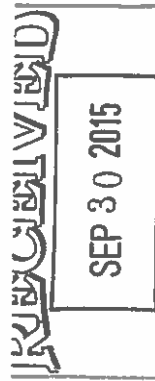
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 Monthly data generated on Thursday, June 30, 2015 at 13:00 UTC
 * Denotes incomplete record

SEP 30 2015

Oklahoma Water Resources Board

MESONET CLIMATOLOGICAL DATA SUMMARY													
		2015			May			2015					
		Nearest City: 2.0 NNE Ada			Time Zone: Midnight-Midnight CST			County: Pontotoc					
		Longitude: 96-40-08			Elevation: 968 feet								
DAY	TEMPERATURE (F)	DEWPT	DEG DAYS	HUMIDITY (%)	RAIN (in)	PRESSURE (in) MSL	WIND DIR	WIND SPEED (mph) AVG	SOLAR (MJ/m2)	4" SOIL TEMPERATURES SOD BARE MAX MIN			
1	78	47	63.6	49.3	0	2	0	0	27.88	67.3	66.1	75	58
2	79	54	67.2	53.7	0	0	0	0	26.59	68.2	68.1	78	60
3	80	62	70.5	54.4	0	6	0	6	27.32	69.2	71.6	82	63
4	81	61	70.2	58.3	0	6	0	6	27.13	70.4	73.9	84	66
5	80	60	67.4	60.3	0	5	0	5	17.51	69.8	72.0	79	66
6	79	66	70.6	66.0	0	7	0	7	13.51	69.6	70.2	75	68
7	78	60	68.2	63.4	0	4	0	4	17.41	70.7	70.9	76	66
8	80	62	68.7	66.0	0	6	0	6	10.83	70.5	70.3	75	67
9	69	61	64.2	63.2	0	0	0	0	3.14	68.4	67.6	69	66
10	74	60	66.1	63.9	0	2	0	2	7.16	67.5	67.4	70	66
11	69	49	58.8	46.6	0	6	0	6	29.84	68.1	65.6	73	58
12	71	49	59.7	49.2	5	0	0	5	24.30	67.8	65.3	73	59
13	65	56	60.0	58.0	5	0	0	5	5.46	66.0	63.8	65	62
14	82	64	71.0	65.9	0	8	0	8	17.80	68.6	68.3	75	64
15	78	63	70.7	66.2	0	5	0	5	16.08	70.7	70.3	74	67
16	80	63	72.7	67.3	0	7	0	7	12.68	71.2	70.9	74	68
17	81	63	70.8	64.7	0	7	0	7	24.63	72.4	72.0	79	66
18	83	65	72.0	66.7	0	9	0	9	20.95	74.0	73.6	79	68
19	78	65	70.1	66.4	0	6	0	6	10.13	72.7	71.7	75	69
20	71	55	61.9	58.6	2	0	0	2	8.99	70.7	69.0	71	64
21	66	52	57.4	49.7	6	0	0	6	25.31	68.7	65.8	73	60
22	58	53	55.5	54.1	10	0	0	10	3.47	65.1	62.3	64	62
23	72	58	65.0	63.5	0	0	0	0	5.28	65.2	64.3	67	62
24	70	60	64.5	63.0	0	0	0	0	9.43	66.8	66.8	71	64
25	79	57	67.2	64.2	0	3	0	3	11.41	69.2	69.2	75	66
26	80	58	68.9	63.8	0	4	0	4	24.48	70.6	69.9	77	63
27	76	64	68.3	64.5	0	5	0	5	8.51	70.3	69.3	71	68
28	83	63	70.9	67.1	0	8	0	8	16.02	70.6	70.8	78	66
29	74	63	67.9	65.8	0	3	0	3	9.71	71.2	71.3	74	69
30	69	57	62.9	59.7	2	0	0	2	11.62	69.4	68.0	71	66
31	72	56	63.4	57.8	1	0	0	1	15.34	69.1	67.7	73	64
	75	59	66.3	60.7	<- Monthly Averages ->				15.80	69.4	68.8	74	65
Temperature - Highest: 83		Lowest: 47		Degree Days - Total HDD: 39		Total CDD: 103		Number of Days With:		Rainfall > 0.01 inch: 21			
Rainfall: Monthly Total: 19.66 in.		Greatest 24 Hr: 2.87 in.		Humidity - Highest: 100		Lowest: 33		Tmax > 90: 0		Rainfall > 0.10 inch: 20			
								Tmin < 32: 0		Avg Wind Speed > 10 mph: 1			
								Tmin < 0: 0		Max Wind Speed > 30 mph: 8			

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 Monthly data generated on Friday, July 31, 2015 at 13:04 UTC
 * Denotes incomplete record



MESONET CLIMATOLOGICAL DATA SUMMARY
 (ADAX) Ada
 Latitude: 34-47-54
 June 2015
 Nearest City: 2.0 NNE Ada
 Longitude: 96-40-08
 Oklahoma Water Resources Board
 Time Zone: Midnight-Midnight CST
 County: Pontotoc
 Elevation: 968 feet

DAY	TEMPERATURE (F) MAX MIN AVG DEWPT	DEG DAYS HDD CDD	HUMIDITY (%) MAX MIN AVG	RAIN (in)	PRESSURE (in) STN MSL	WIND DIR AVG MAX	SOLAR (MJ/m2)	4" SOIL TEMPERATURES SOD BARE MAX MIN
1	80 52 67.2 59.2	0 1	100 53 78	0.00	29.03 30.07	SSE 2.6 11.0	28.29	70.8 80
2	85 60 74.3 64.2	0 8	97 54 73	0.00	28.95 29.98	SSE 6.0 18.6	28.47	73.8 81
3	86 67 76.5 65.8	0 11	92 52 71	0.00	28.89 29.92	SSE 8.0 23.2	28.53	75.6 82
4	88 68 77.9 67.4	0 13	94 48 72	0.00	28.94 29.98	SSE 7.4 18.0	27.41	76.6 87
5	89 68 78.4 67.9	0 13	96 49 72	0.00	28.99 30.03	S 4.9 17.4	28.41	77.7 91
6	90 71 80.5 68.7	0 16	94 47 69	0.00	28.96 29.99	SSE 4.7 13.0	25.38	78.5 92
7	91 73 82.3 65.3	0 17	80 39 58	0.00	28.89 29.93	SW 8.3 22.0	28.65	79.4 93
8	90 70 79.2 67.7	0 15	97 46 70	0.00	28.91 29.94	WNW 3.3 16.6	24.47	79.5 94
9	93 64 80.2 64.2	0 14	100 31 63	0.00	28.88 29.91	SSE 2.8 10.8	27.56	79.4 96
10	94 69 83.3 65.8	0 17	84 34 58	0.00	28.80 29.83	SSE 5.4 16.4	29.77	80.6 97
11	91 74 82.8 66.9	0 18	86 41 61	0.00	28.75 29.78	SSE 9.1 24.5	29.78	81.7 98
12	91 72 81.7 68.4	0 17	89 42 66	0.00	28.81 29.84	SSE 7.8 21.9	26.31	81.9 95
13	85 68 73.0 68.9	0 12	98 63 88	1.12	28.85 29.88	SSE 5.8 24.9	15.58	81.7 86
14	86 71 75.5 72.0	0 13	98 64 89	0.61	28.87 29.90	SSE 7.2 24.1	14.28	78.7 83
15	87 70 74.6 71.4	0 13	99 63 91	1.71	28.95 29.99	SSE 5.8 26.0	14.15	78.7 84
16	80 68 72.9 70.9	0 9	100 76 94	0.10	29.00 30.04	ESE 3.4 12.7	12.80	77.7 82
17	74 70 72.0 71.3	0 7	99 95 98	3.63	28.89 29.92	E 6.4 29.4	2.46	76.3 75.1
18	80 69 72.7 69.9	0 10	99 72 91	3.29	28.78 29.81	NW 9.5 27.7	12.12	74.7 74.7
19	91 67 79.3 69.5	0 14	98 45 75	0.00	28.93 29.96	W 3.6 12.2	28.69	77.4 87
20	90 75 81.3 71.1	0 18	87 50 72	0.00	28.92 29.95	SW 9.6 24.1	27.78	80.0 86
21	83 71 76.8 71.2	0 12	93 69 83	0.00	28.98 30.02	S 8.4 20.2	20.42	78.3 84
22	90 74 81.6 71.4	0 17	95 53 72	0.00	28.99 30.02	SSW 11.0 26.8	27.68	80.7 85
23	91 73 82.2 70.2	0 17	92 43 69	0.00	29.08 30.12	S 6.5 16.7	28.84	81.7 94
24	92 77 83.6 70.4	0 19	83 44 66	0.00	29.07 30.11	S 8.0 19.2	29.36	82.4 97
25	92 75 83.6 69.9	0 19	81 48 64	0.00	28.99 30.03	SW 8.4 21.3	28.19	82.5 98
26	90 71 80.5 70.6	0 16	97 54 73	0.14	28.91 29.94	SW 7.5 25.0	22.17	82.1 94
27	84 64 74.7 65.9	0 9	98 46 77	0.01	29.01 30.05	NNE 5.9 17.7	29.60	84.5 94
28	89 60 76.6 62.3	0 10	100 38 65	0.00	28.97 30.01	SSW 4.3 16.0	30.62	79.3 85.4
29	93 69 81.0 65.5	0 16	91 34 61	0.04	28.91 29.95	WSW 4.8 28.3	26.19	80.9 98
30	94* 66* 81.8* 69.1*	0* 15*	95* 40* 68*	0.00*	28.94* 29.97*	S * 5.3* 17.5*	NA	82.9* 89.2* 100* 79*
	88* 69* 78.3* 68.1*	<- Monthly Averages ->			28.93* 29.96*	SSE* 6.4* 29.4*	24.27*	79.1* 81.9* 90* 75*

Temperature - Highest: 94*
 Lowest: 52*
 Rainfall: Monthly Total: 10.65* in.
 Greatest 24 Hr: 3.63* in.
 Degree Days - Total HDD: 0*
 Total CDD: 404*
 Humidity - Highest: 100*
 Lowest: 31*
 Number of Days With:
 Tmax > 90: 16*
 Tmax > 32: 0*
 Tmin < 32: 0*
 Tmin < 0: 0*
 Rainfall > 0.01 inch: 9*
 Rainfall > 0.10 inch: 7*
 Avg Wind Speed > 10 mph: 1*
 Max Wind Speed > 30 mph: 0*