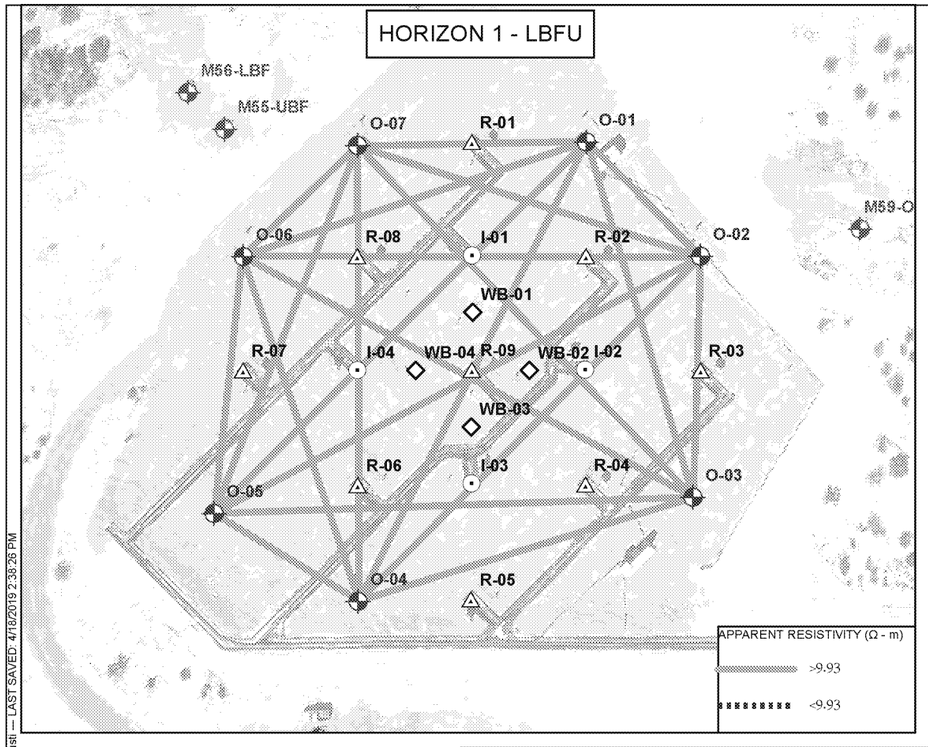
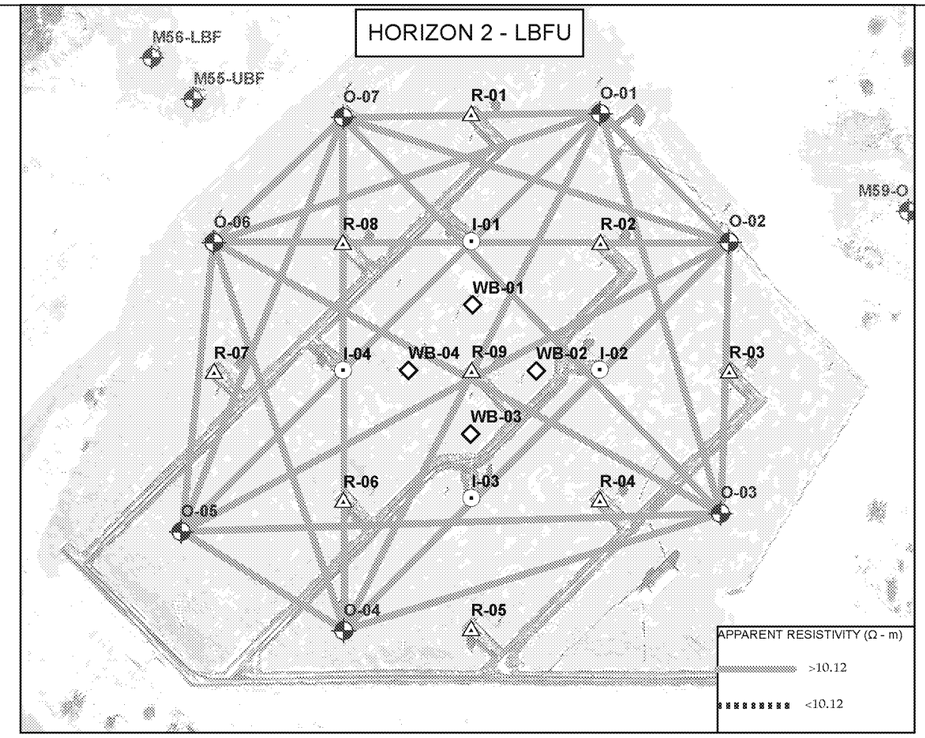
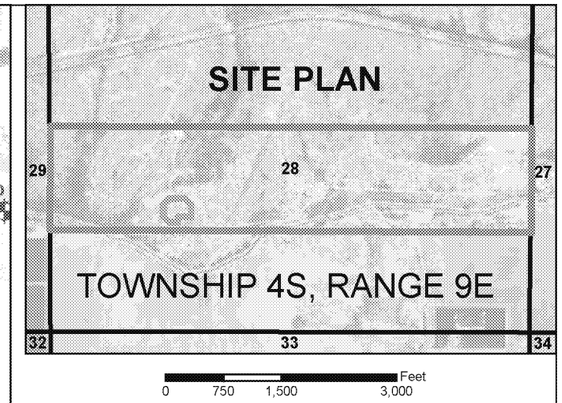
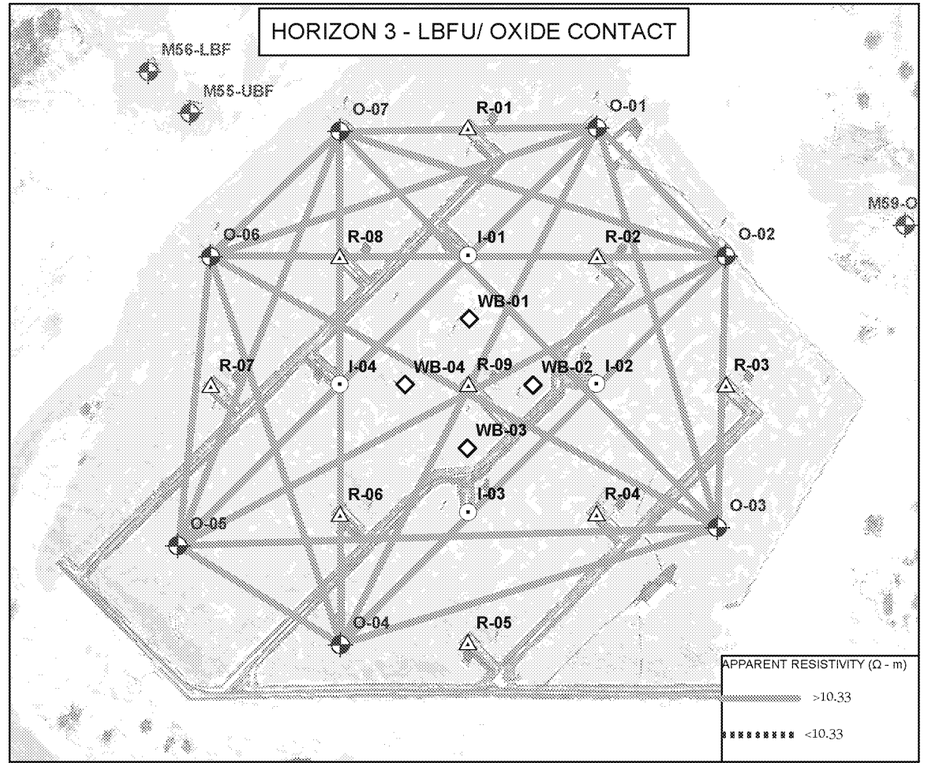






LEGEND

- INJECTION WELL
- OBSERVATION WELL
- RECOVERY WELL
- SUPPLEMENTAL MONITORING WELL
- WESTBAY WELL
- PTF WELLFIELD
- STATE LAND LEASE



NOTES

1. ALL LOCATIONS AND DIMENSIONS APPROXIMATE
2. (Ω - m) = OHM - METERS
3. AREIAL IMAGERY SOURCE: FLORENCE COPPER INC., OCTOBER 2018

0 80 160
SCALE IN FEET

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

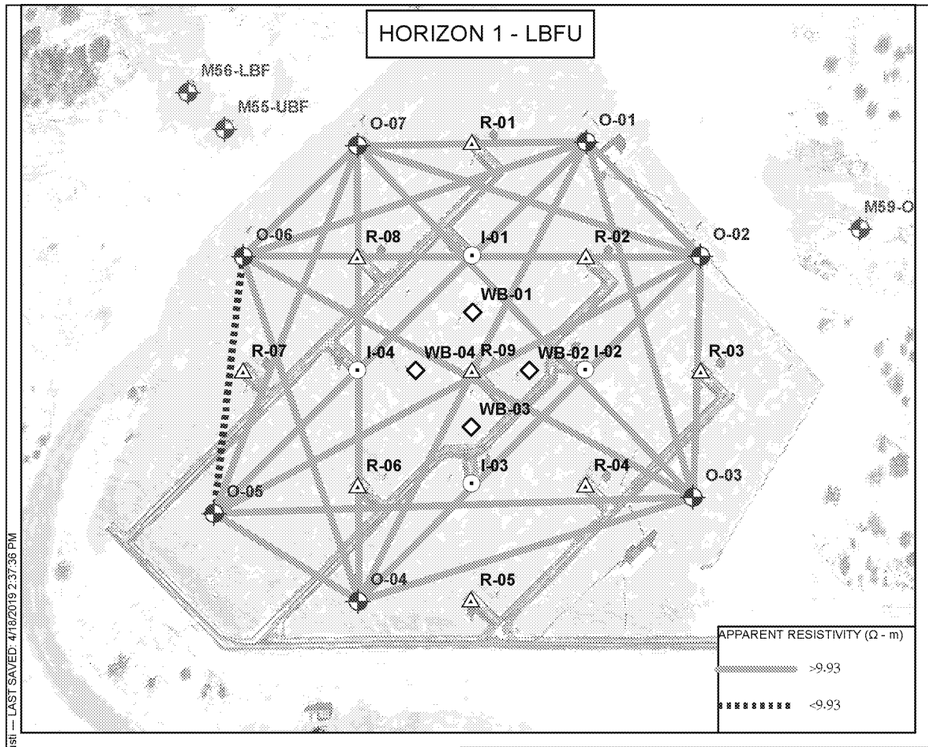
BASELINE APPARENT RESISTIVITY OF ELECTRODE PAIRS BY HORIZON- 2/28/2019
PRODUCTION TEST FACILITY

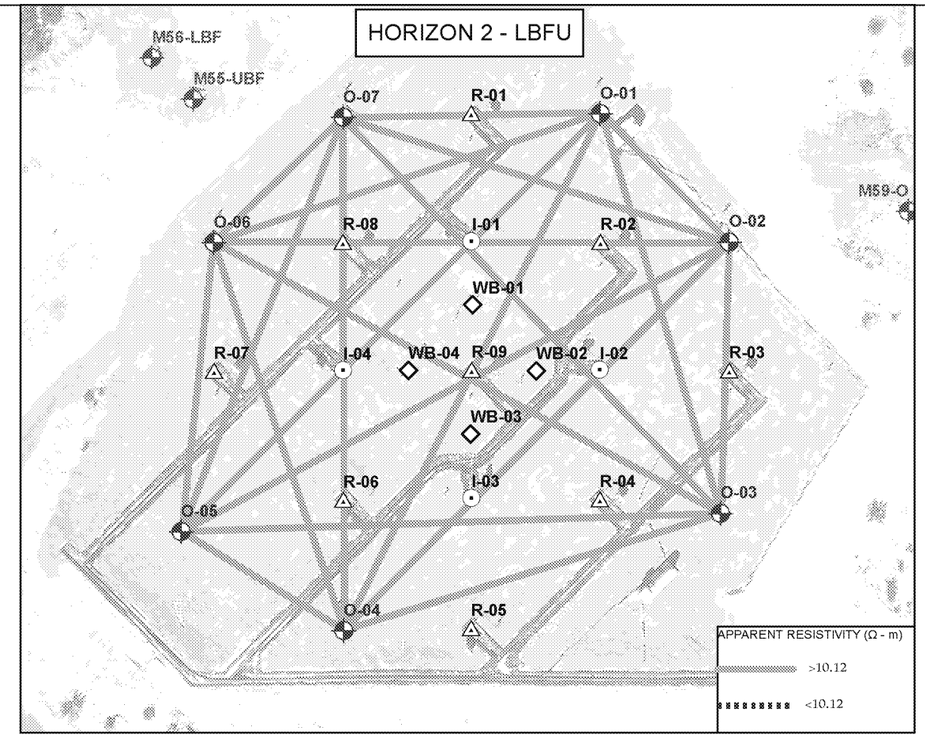
FLORENCE COPPER

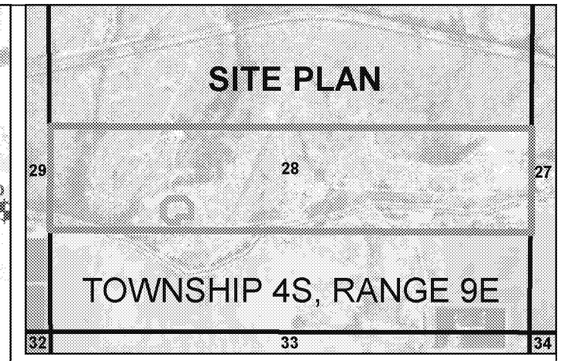
APRIL 2019

FIGURE 9

GIS FILE PATH: G:\Projects\Florence Copper\132473 Florence Groundwater Permitting\GIS\Maps\2019_04\BULK EC\2019_0228.mxd — USER: cgiusti — LAST SAVED: 4/18/2019 2:39:26 PM

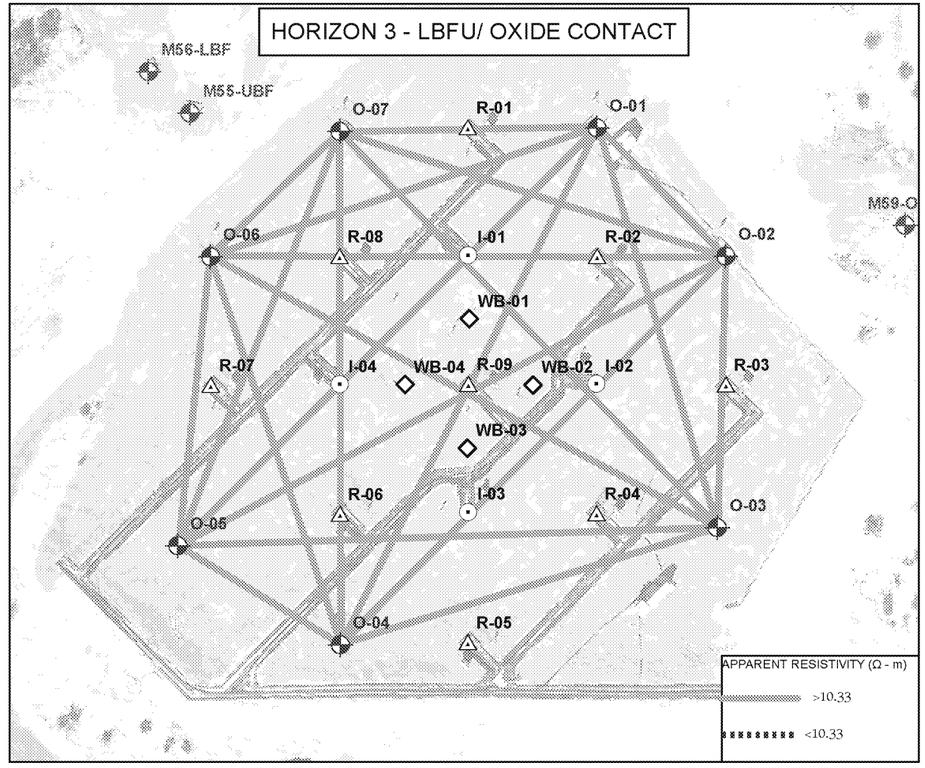






LEGEND

- INJECTION WELL
- OBSERVATION WELL
- RECOVERY WELL
- SUPPLEMENTAL MONITORING WELL
- WESTBAY WELL
- PTF WELLFIELD
- STATE LAND LEASE



NOTES

1. ALL LOCATIONS AND DIMENSIONS APPROXIMATE
2. (Ω - m) = OHM - METERS
3. AREIAL IMAGERY SOURCE: FLORENCE COPPER INC., OCTOBER 2018

0 80 160
SCALE IN FEET

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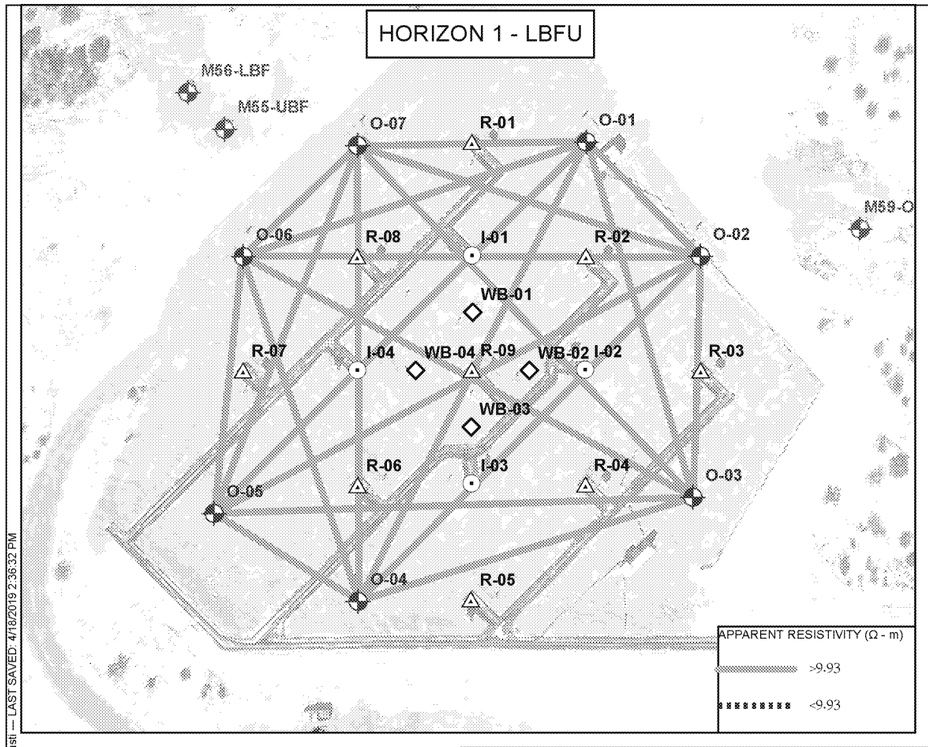
BASELINE APPARENT RESISTIVITY OF ELECTRODE PAIRS BY HORIZON- 03/06/2019
PRODUCTION TEST FACILITY

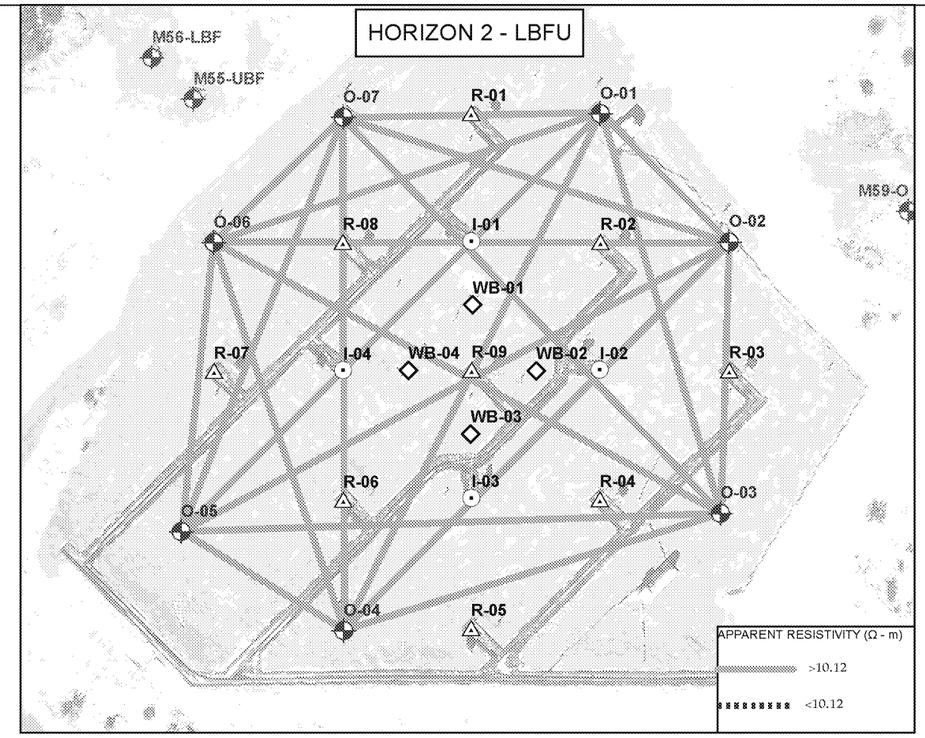
FLORENCE COPPER

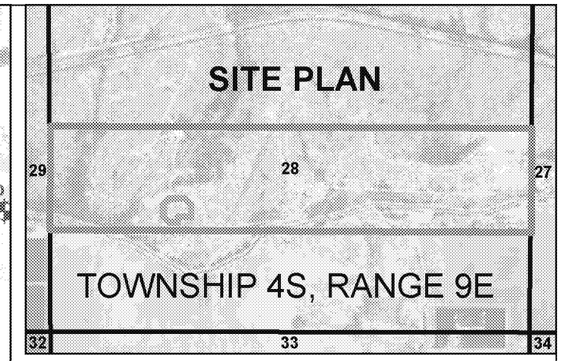
APRIL 2019

FIGURE 10

GIS FILE PATH: G:\Projects\Florence Copper\132473 Florence Groundwater Permitting\GIS\Maps\2019_04\BULK EC\2019_0306.mxd — USER: cgiusti — LAST SAVED: 4/18/2019 2:37:36 PM

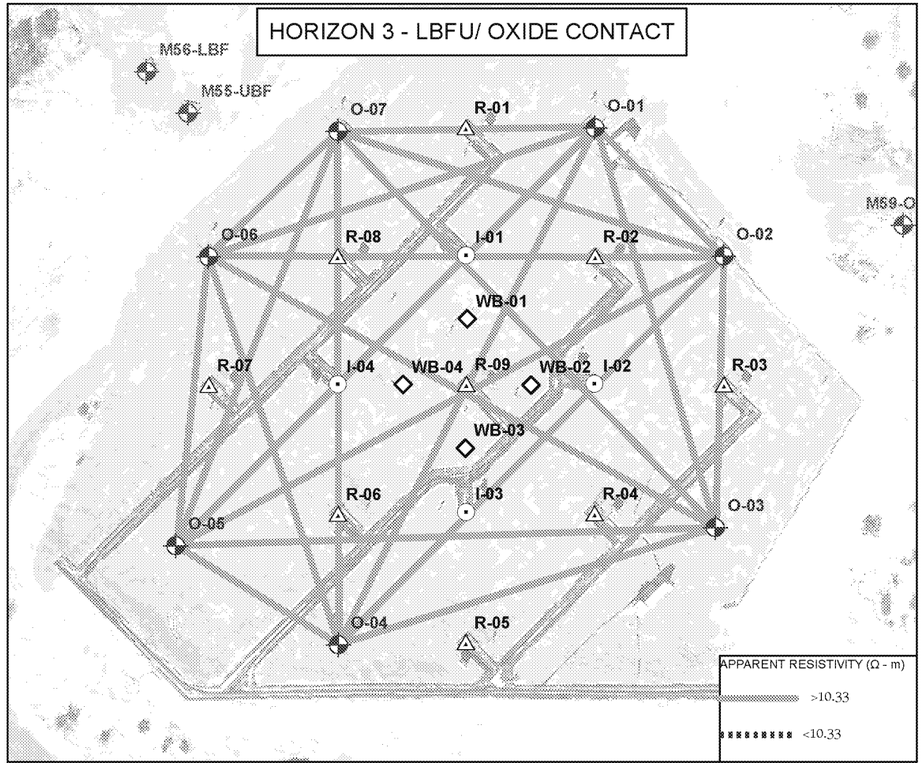






LEGEND

- INJECTION WELL
- OBSERVATION WELL
- RECOVERY WELL
- SUPPLEMENTAL MONITORING WELL
- WESTBAY WELL
- PTF WELLFIELD
- STATE LAND LEASE



NOTES

1. ALL LOCATIONS AND DIMENSIONS APPROXIMATE
2. (Ω - m) = OHM - METERS
3. AREIAL IMAGERY SOURCE: FLORENCE COPPER INC., OCTOBER 2018

0 80 160
SCALE IN FEET

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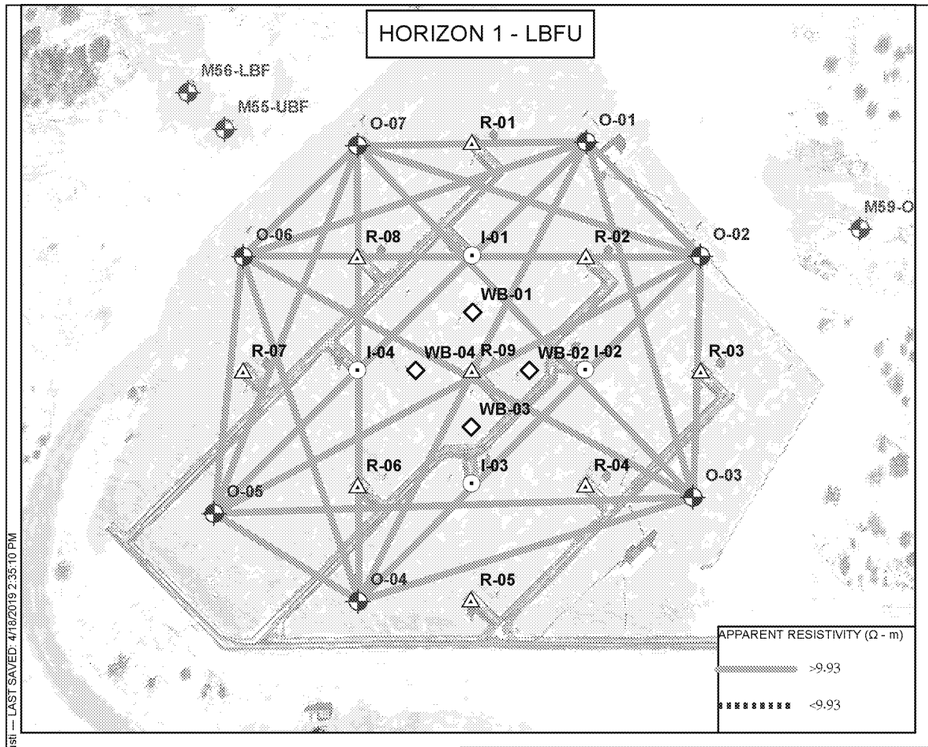
BASELINE APPARENT RESISTIVITY OF ELECTRODE PAIRS BY HORIZON- 3/14/2019
PRODUCTION TEST FACILITY

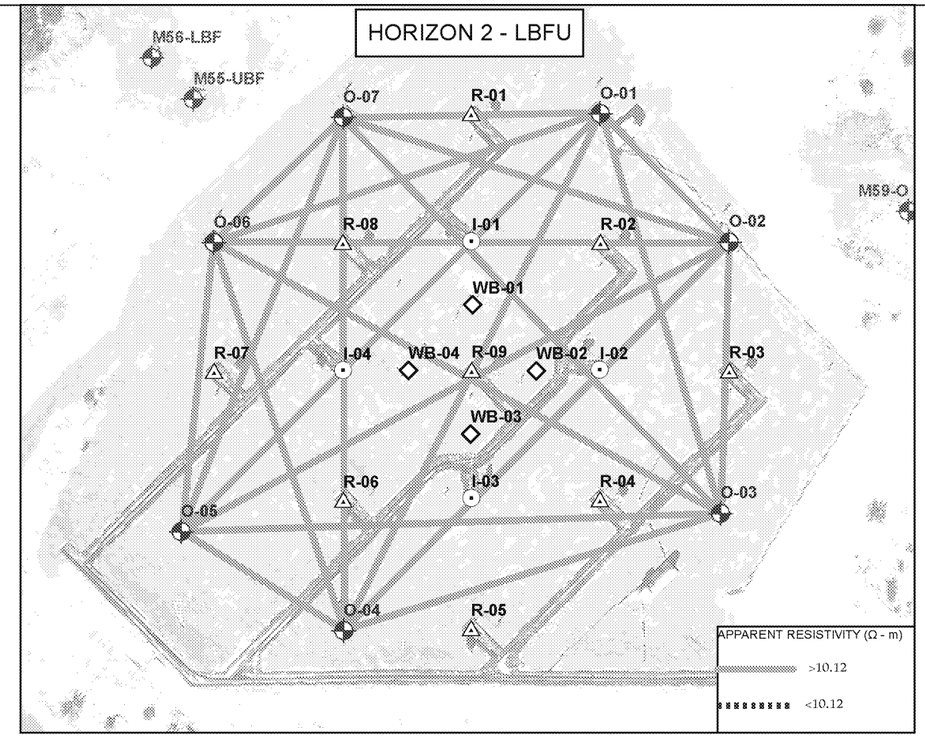
FLORENCE COPPER

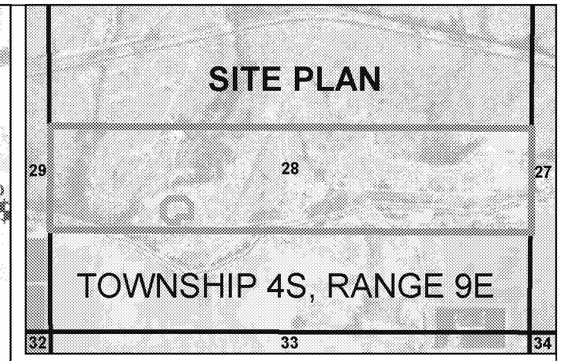
APRIL 2019

FIGURE 11

GIS FILE PATH: G:\Projects\Florence Copper\132473 Florence Groundwater Permitting\GIS\Maps\2019_04\BULK EC\2019_0314.mxd — USER: cgiusti — LAST SAVED: 4/18/2019 2:36:32 PM

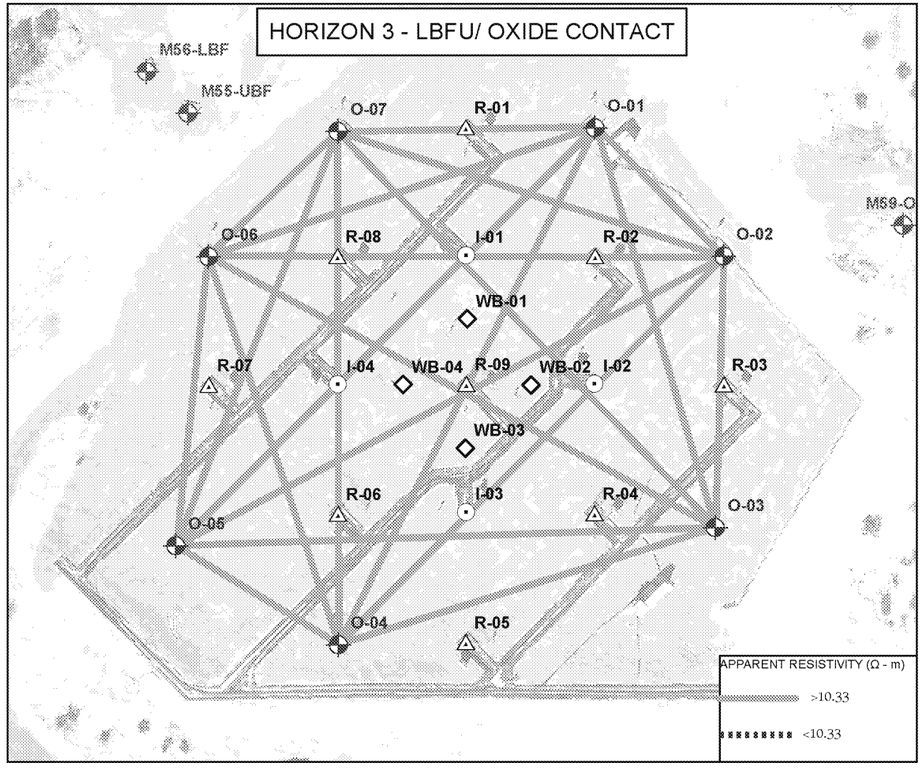






LEGEND

- INJECTION WELL
- OBSERVATION WELL
- RECOVERY WELL
- SUPPLEMENTAL MONITORING WELL
- WESTBAY WELL
- PTF WELLFIELD
- STATE LAND LEASE



NOTES

1. ALL LOCATIONS AND DIMENSIONS APPROXIMATE
2. (Ω - m) = OHM - METERS
3. AREIAL IMAGERY SOURCE: FLORENCE COPPER INC., OCTOBER 2018

0 80 160
SCALE IN FEET

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FLORENCE, ARIZONA

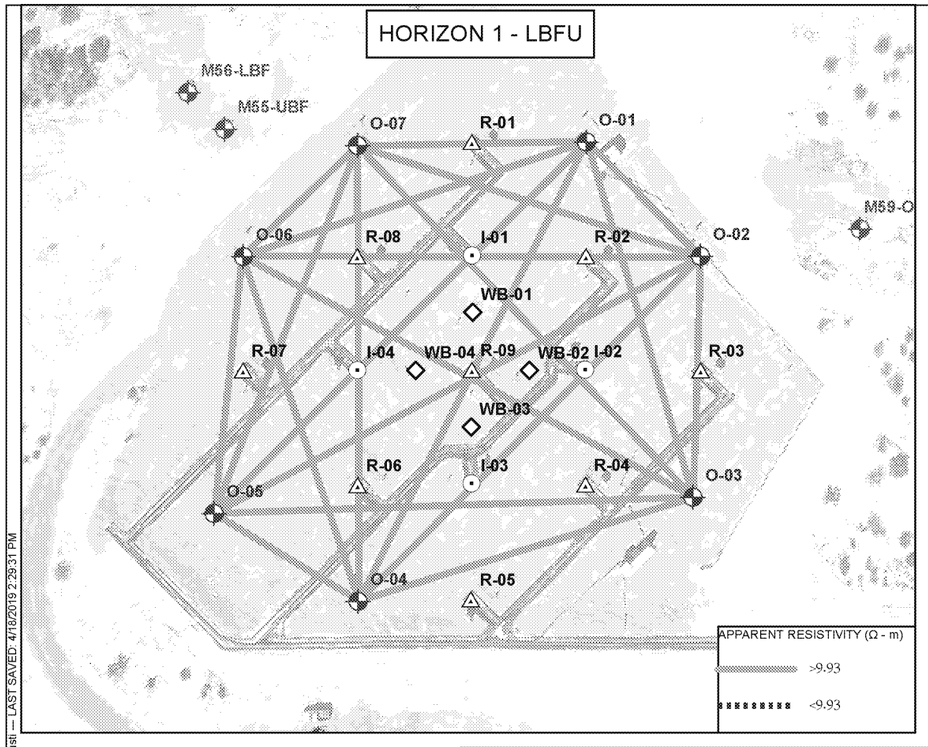
BASELINE APPARENT RESISTIVITY OF ELECTRODE PAIRS BY HORIZON- 3/21/2019
PRODUCTION TEST FACILITY

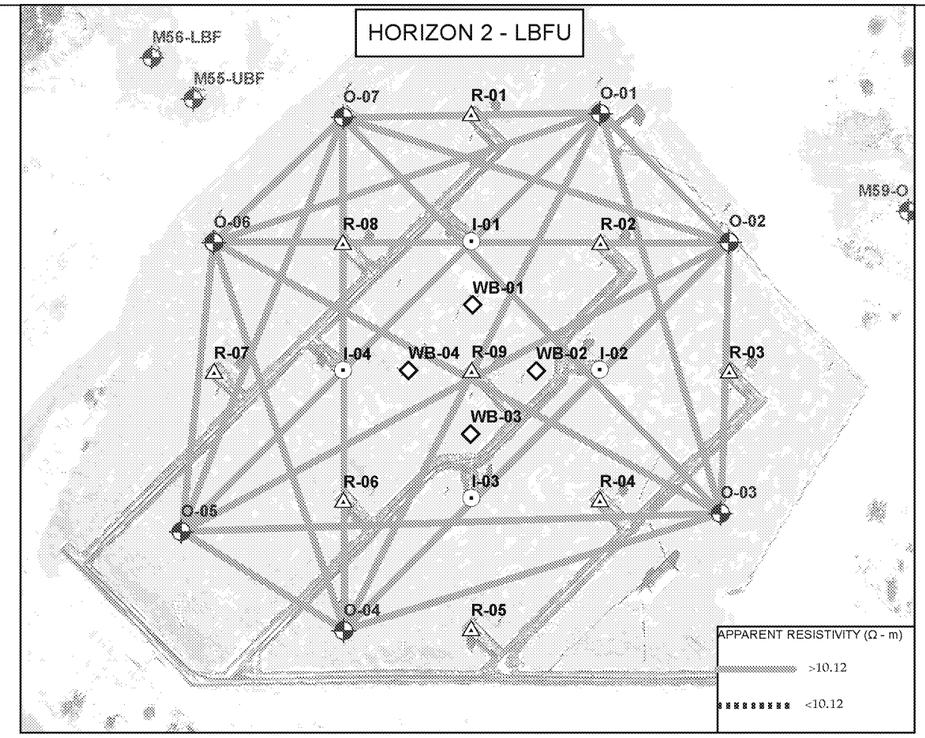
FLORENCE COPPER

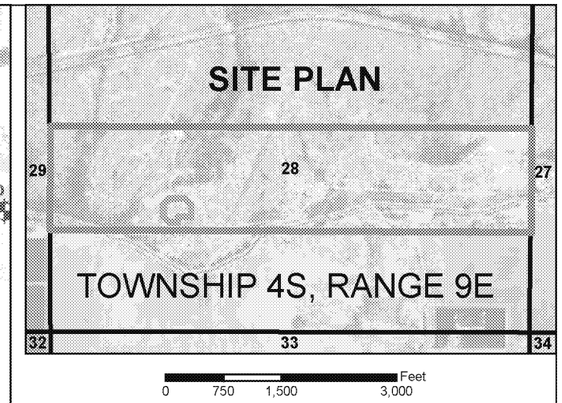
APRIL 2019

FIGURE 12

GIS FILE PATH: G:\Projects\Florence Copper\132473 Florence Groundwater Permitting\GIS\Maps\2019_04\BULK EC\2019_0321.mxd — USER: cgiusti — LAST SAVED: 4/18/2019 2:35:10 PM

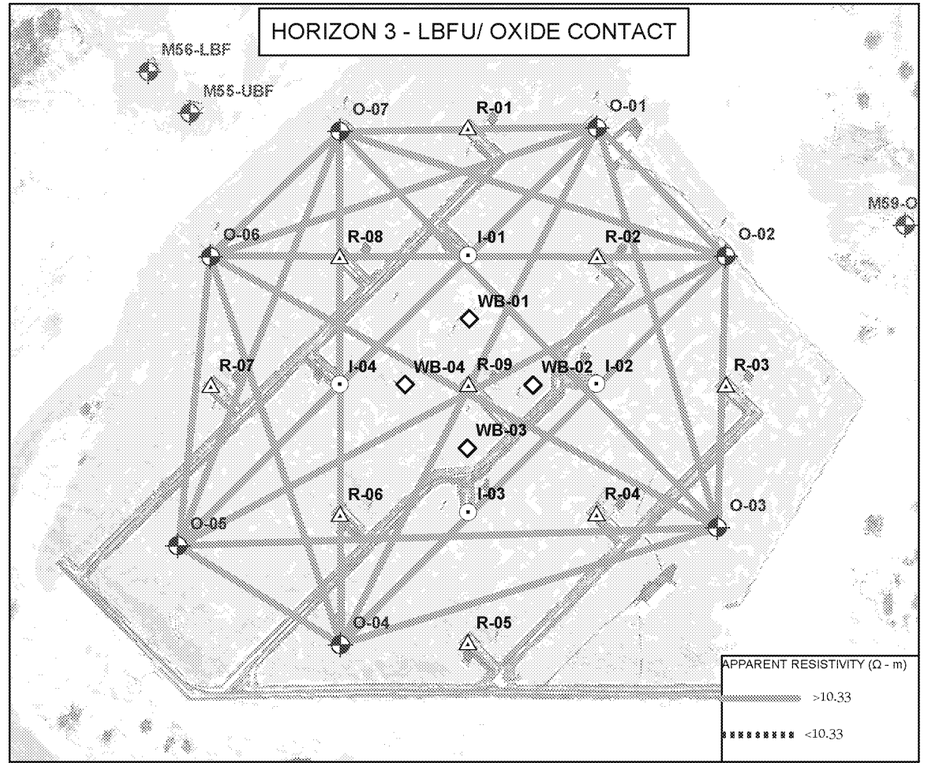






LEGEND

- INJECTION WELL
- OBSERVATION WELL
- RECOVERY WELL
- SUPPLEMENTAL MONITORING WELL
- WESTBAY WELL
- PTF WELLFIELD
- STATE LAND LEASE



NOTES

1. ALL LOCATIONS AND DIMENSIONS APPROXIMATE
2. (Ω - m) = OHM - METERS
3. AREIAL IMAGERY SOURCE: FLORENCE COPPER INC., OCTOBER 2018

0 80 160
SCALE IN FEET

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BASELINE APPARENT RESISTIVITY OF ELECTRODE PAIRS BY HORIZON- 3/28/2019
PRODUCTION TEST FACILITY

FLORENCE COPPER

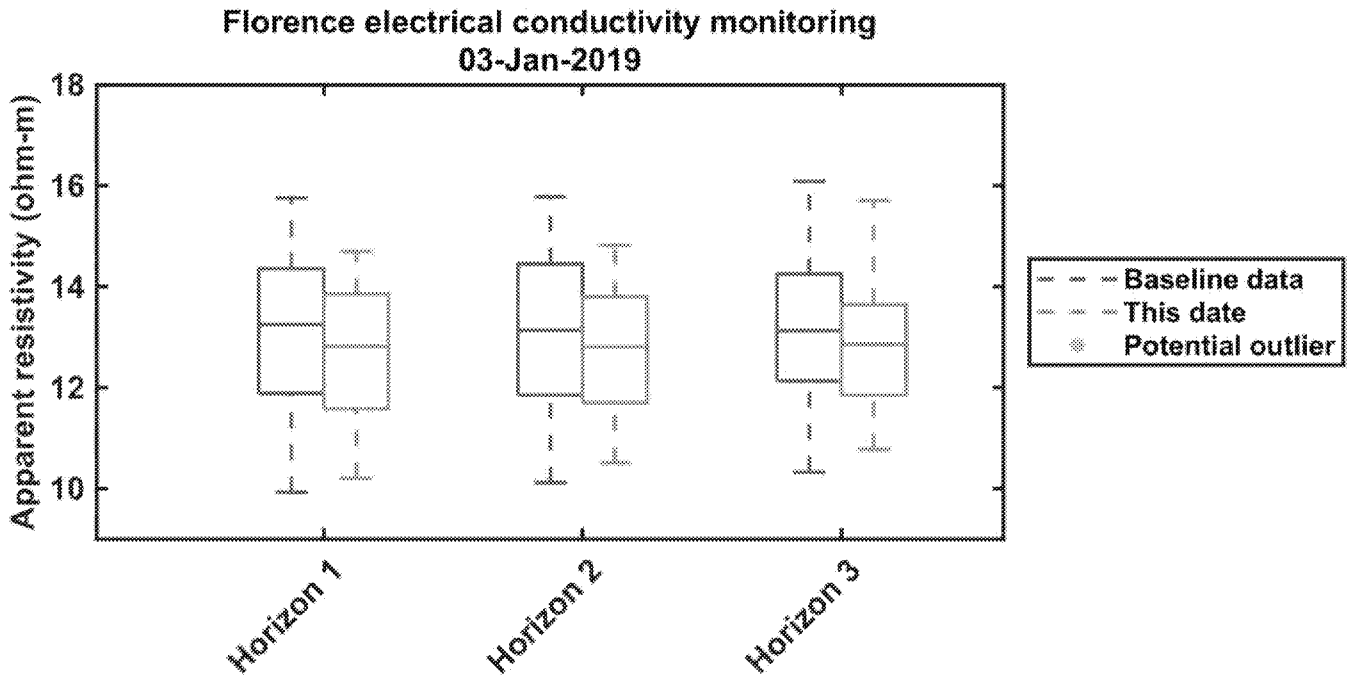
APRIL 2019

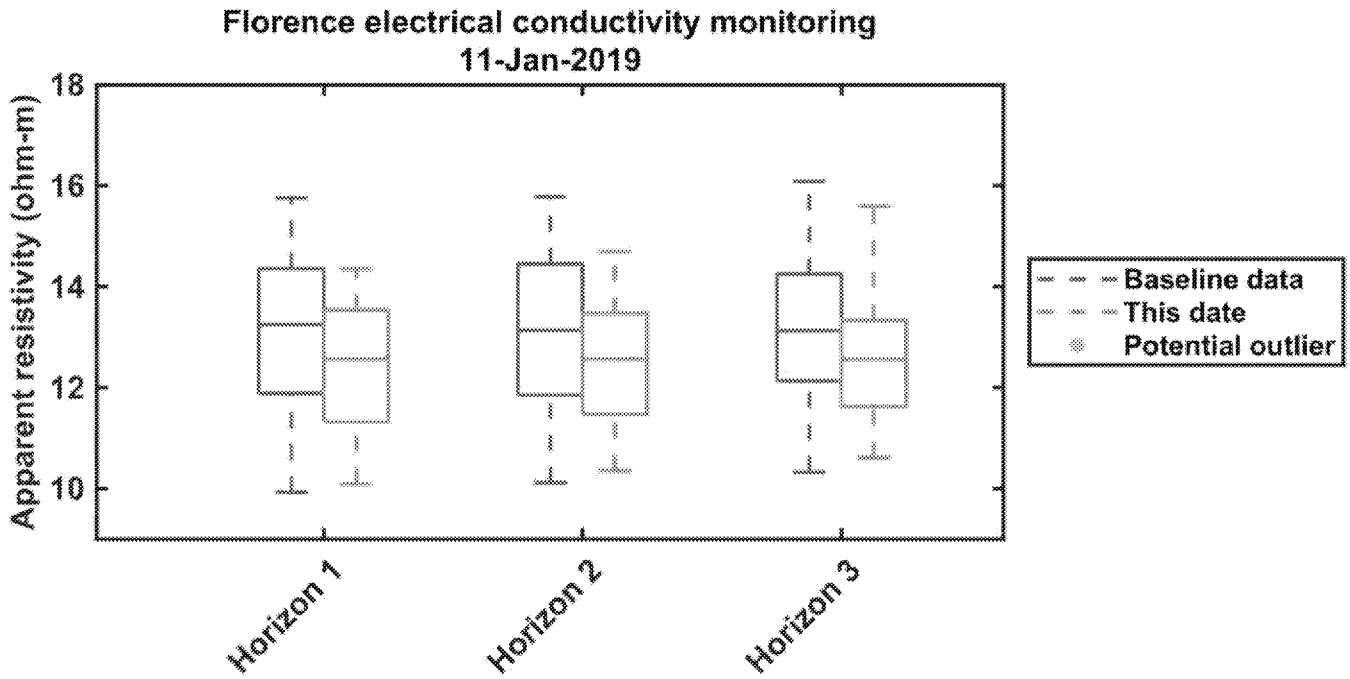
FIGURE 13

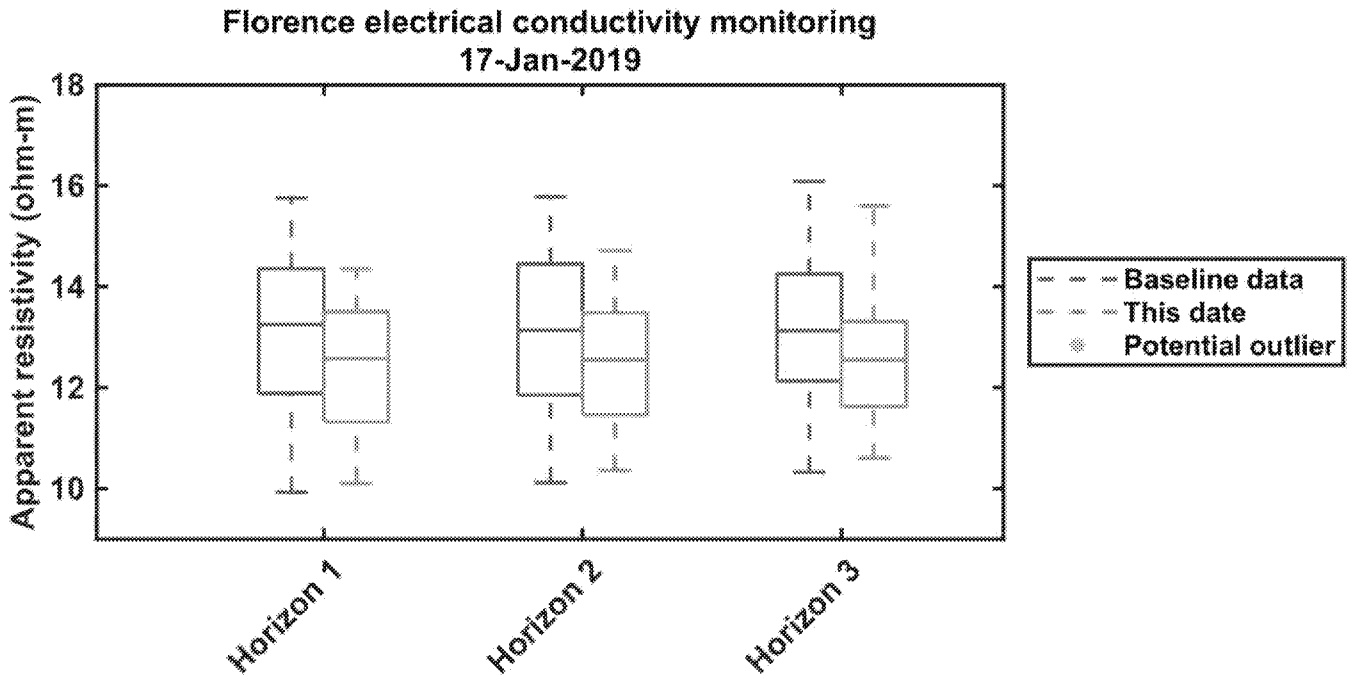
GIS FILE PATH: G:\Projects\Florence Copper\132473 Florence Groundwater Permitting\GIS\Maps\2019_04\BULK EC\2019_0328.mxd — USER: cgiusti — LAST SAVED: 4/18/2019 2:29:31 PM

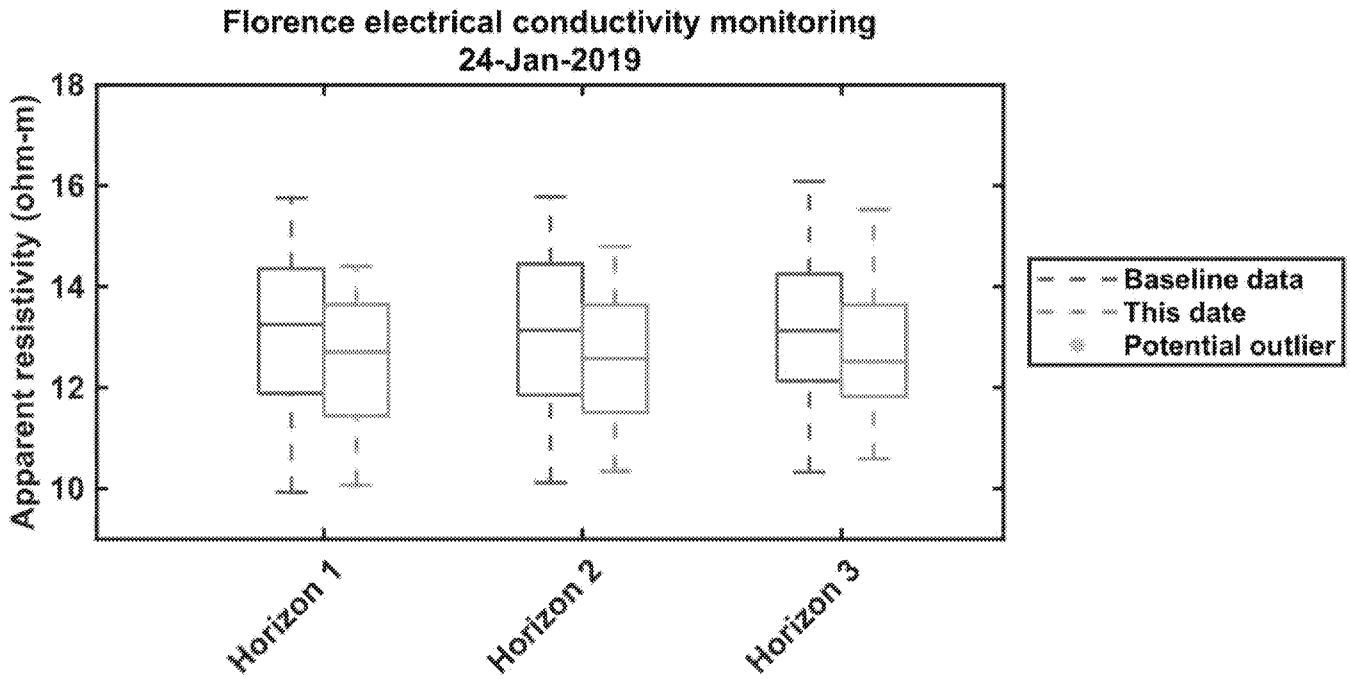
ATTACHMENT A

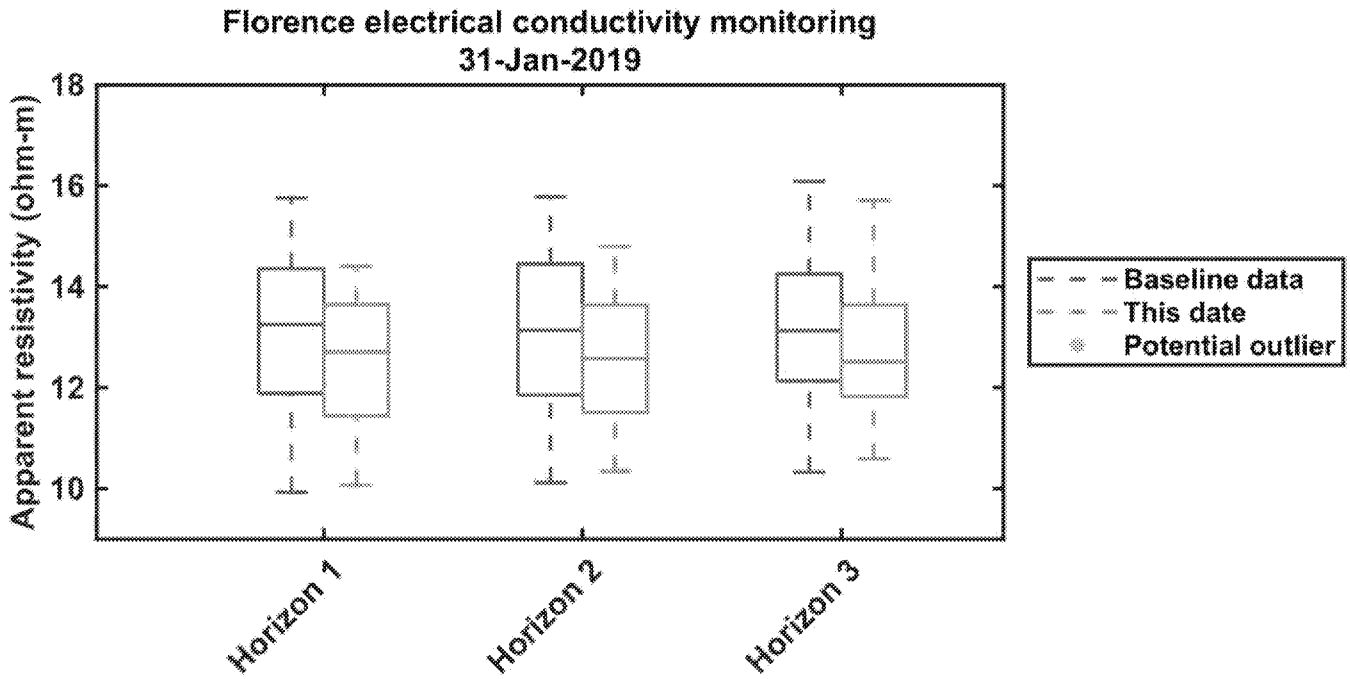
Box Diagrams for First Quarter Monitoring Data

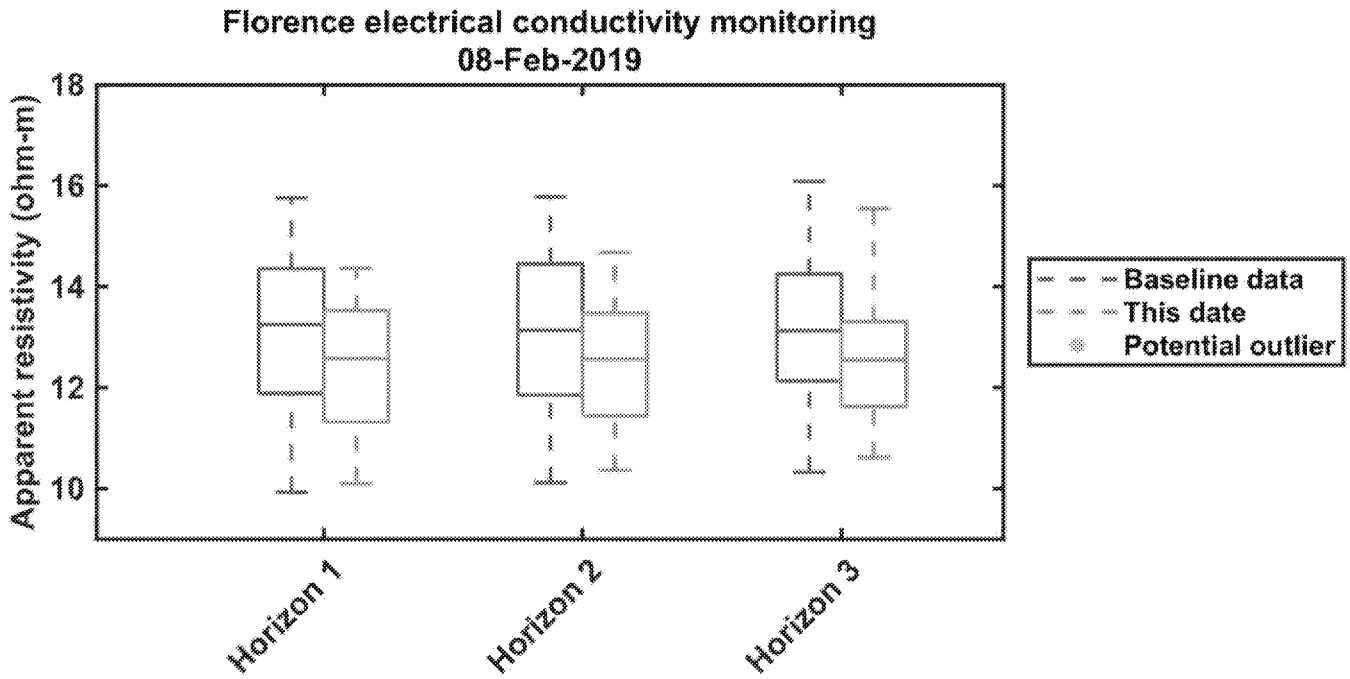

Florence electrical conductivity monitoring
03-Jan-2019
Apparent resistivity (ohm-m)
18
16
14
12
10
Horizon 1
Horizon 2
Horizon 3
Baseline data
This date
Potential outlier

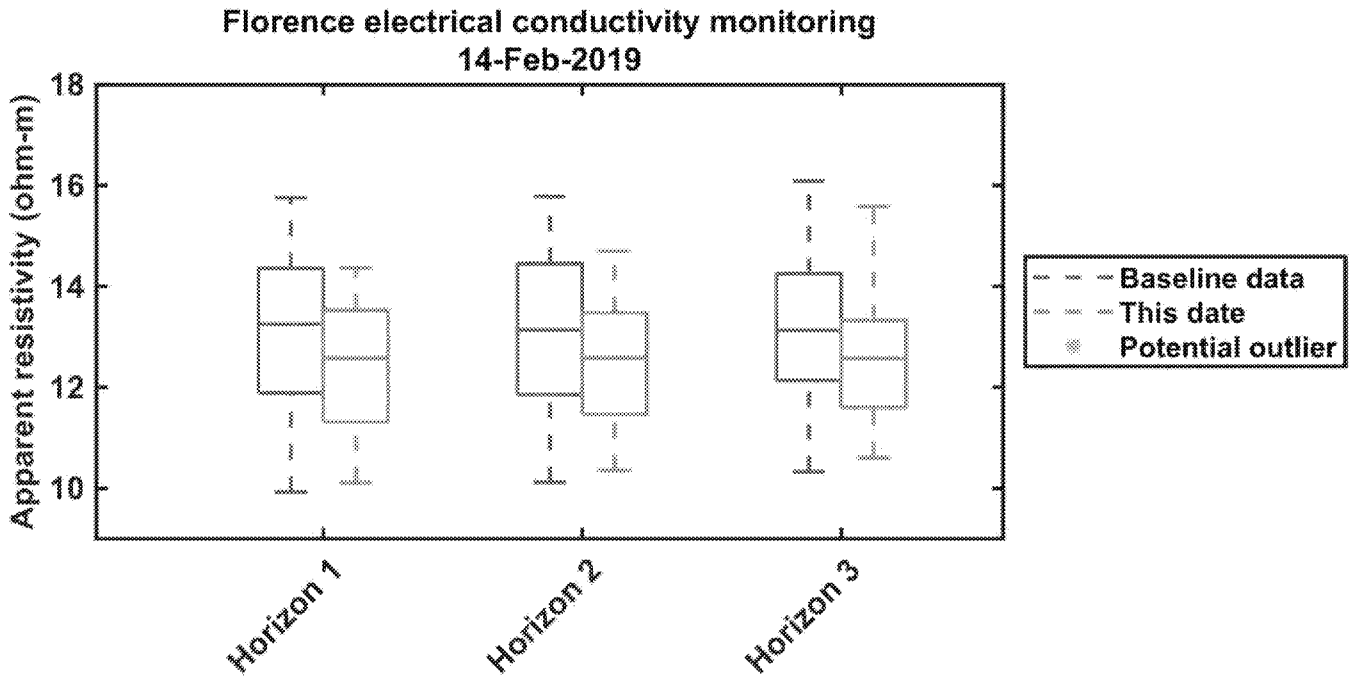

Florence electrical conductivity monitoring
11-Jan-2019
Apparent resistivity (ohm-m)
18
16
14
12
10
Horizon 1
Horizon 2
Horizon 3
Baseline data
This date
Potential outlier

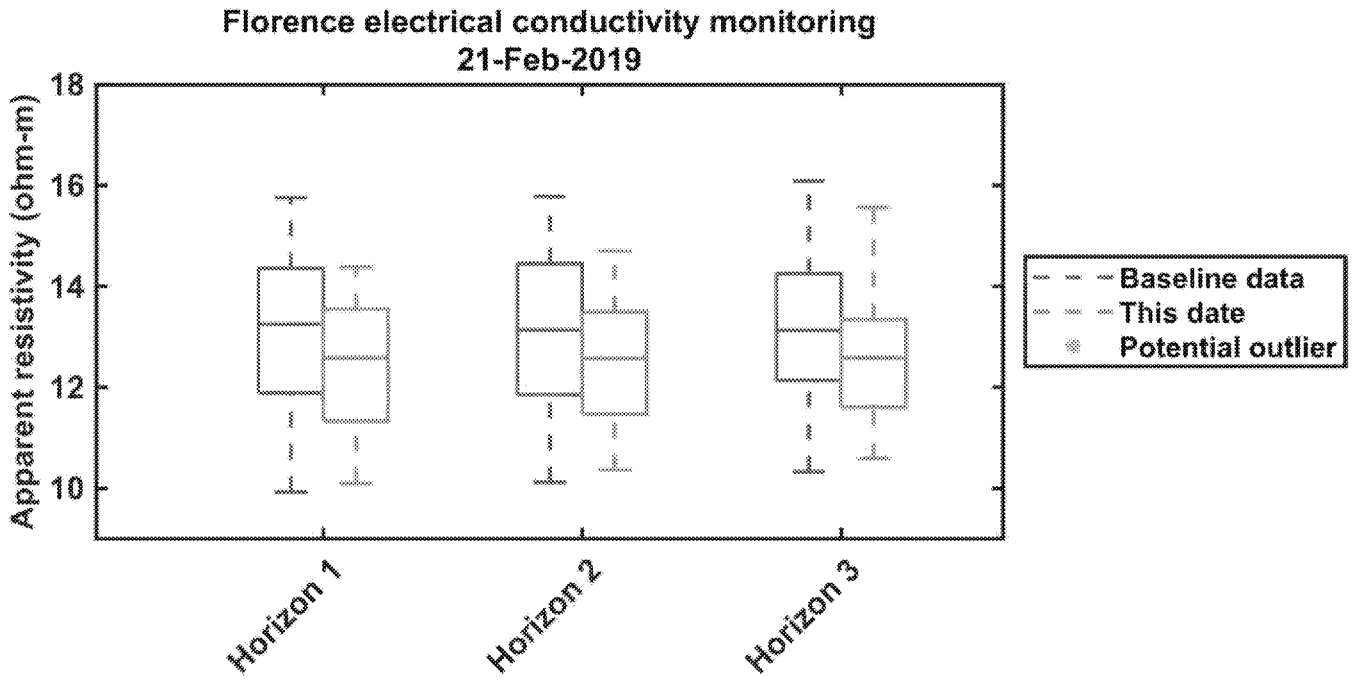

Florence electrical conductivity monitoring
17-Jan-2019
Apparent resistivity (ohm-m)
18
16
14
12
10
Horizon 1
Horizon 2
Horizon 3
Baseline data
This date
Potential outlier

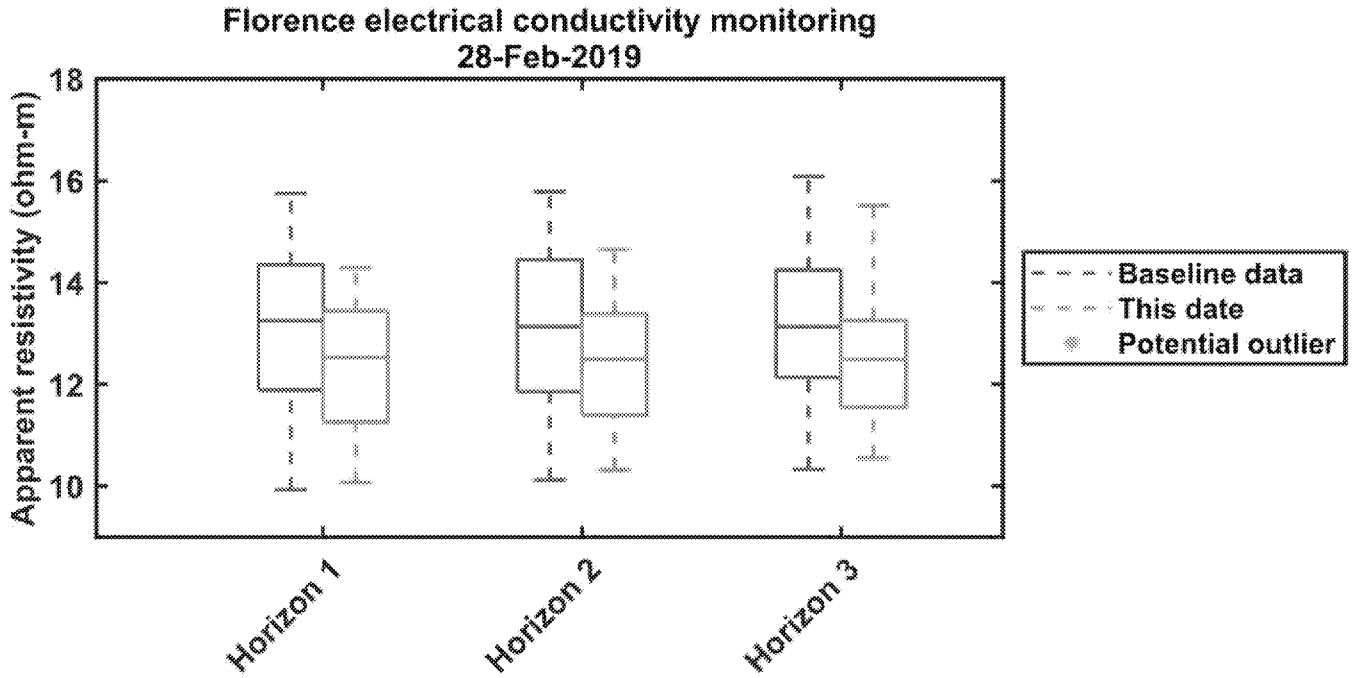

Florence electrical conductivity monitoring
24-Jan-2019
Apparent resistivity (ohm-m)
18
16
14
12
10
Horizon 1
Horizon 2
Horizon 3
Baseline data
This date
Potential outlier

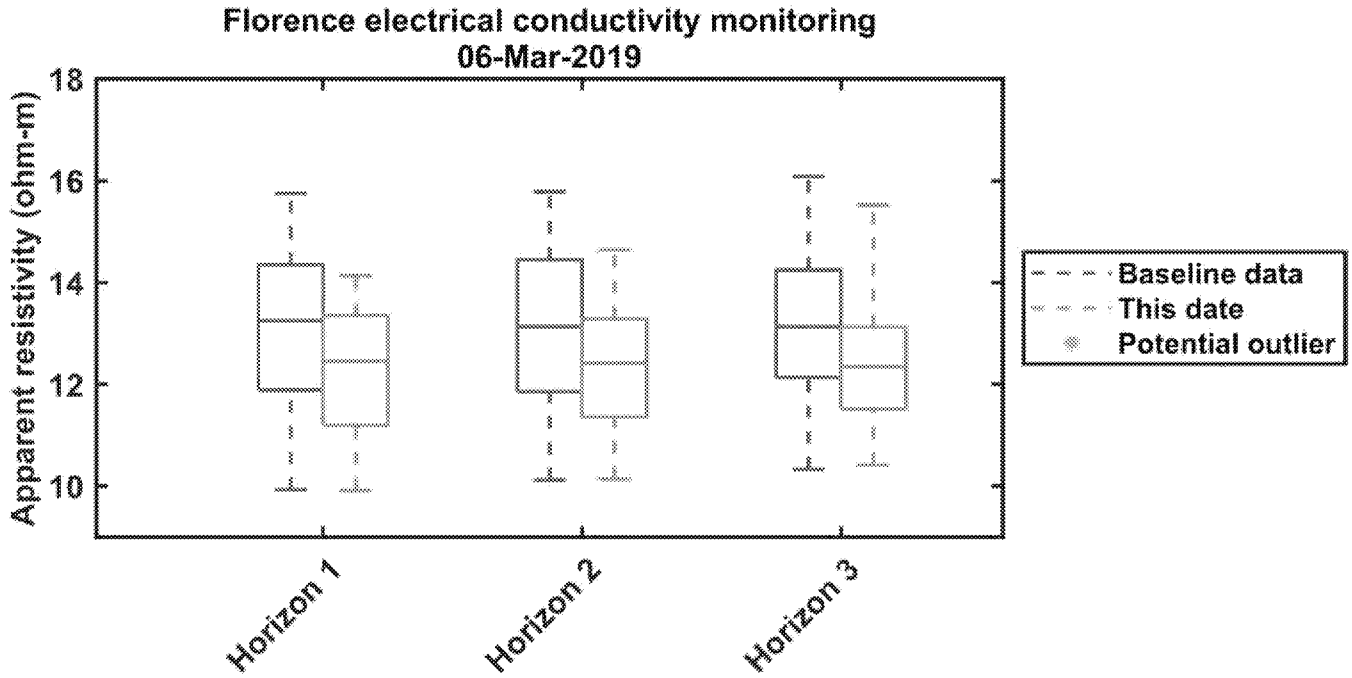

Florence electrical conductivity monitoring
31-Jan-2019
Apparent resistivity (ohm-m)
18
16
14
12
10
Horizon 1
Horizon 2
Horizon 3
Baseline data
This date
Potential outlier

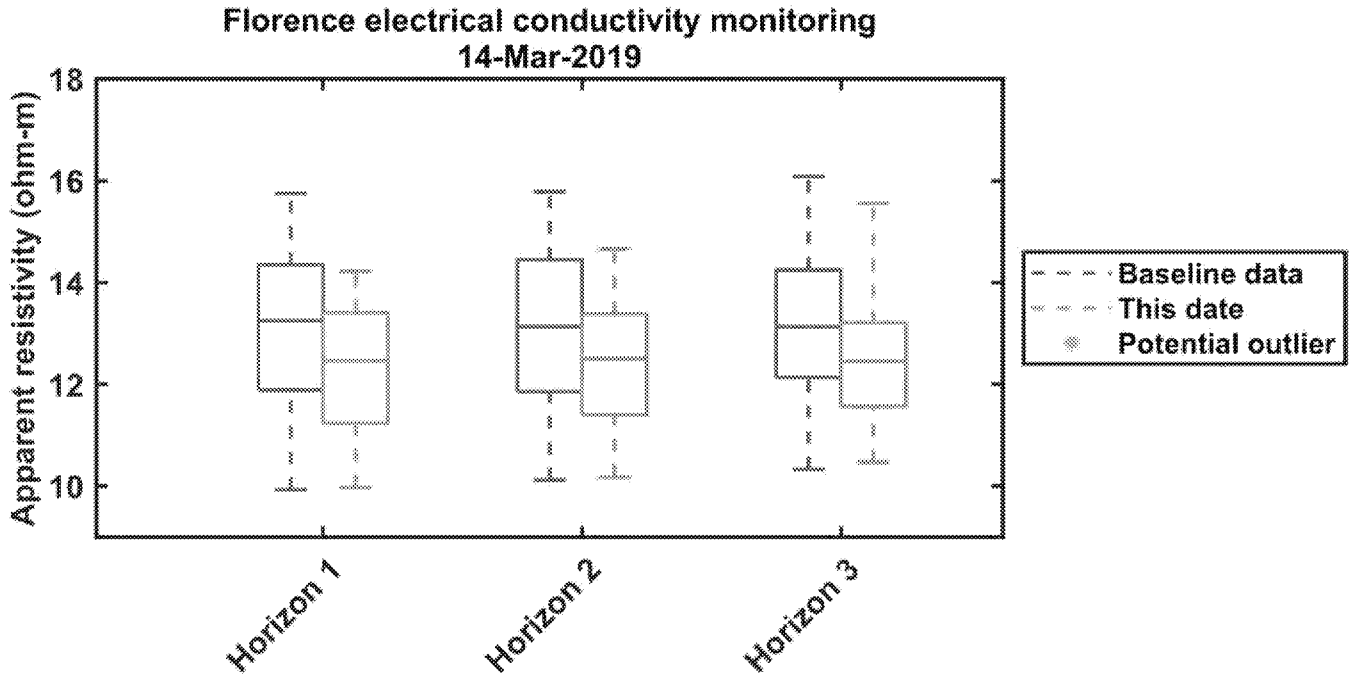

Florence electrical conductivity monitoring
08-Feb-2019
Apparent resistivity (ohm-m)
18
16
14
12
10
Horizon 1
Horizon 2
Horizon 3
Baseline data
This date
Potential outlier

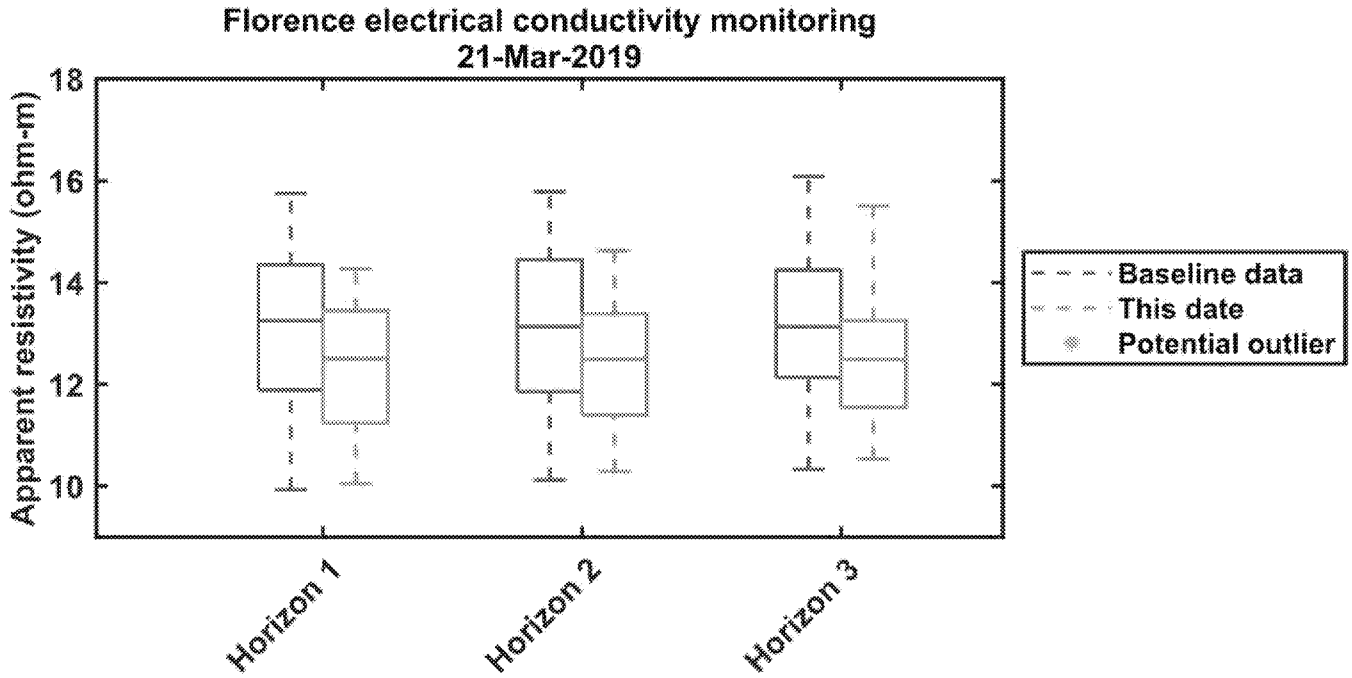

Florence electrical conductivity monitoring
14-Feb-2019
Apparent resistivity (ohm-m)
18
16
14
12
10
Horizon 1
Horizon 2
Horizon 3
Baseline data
This date
Potential outlier

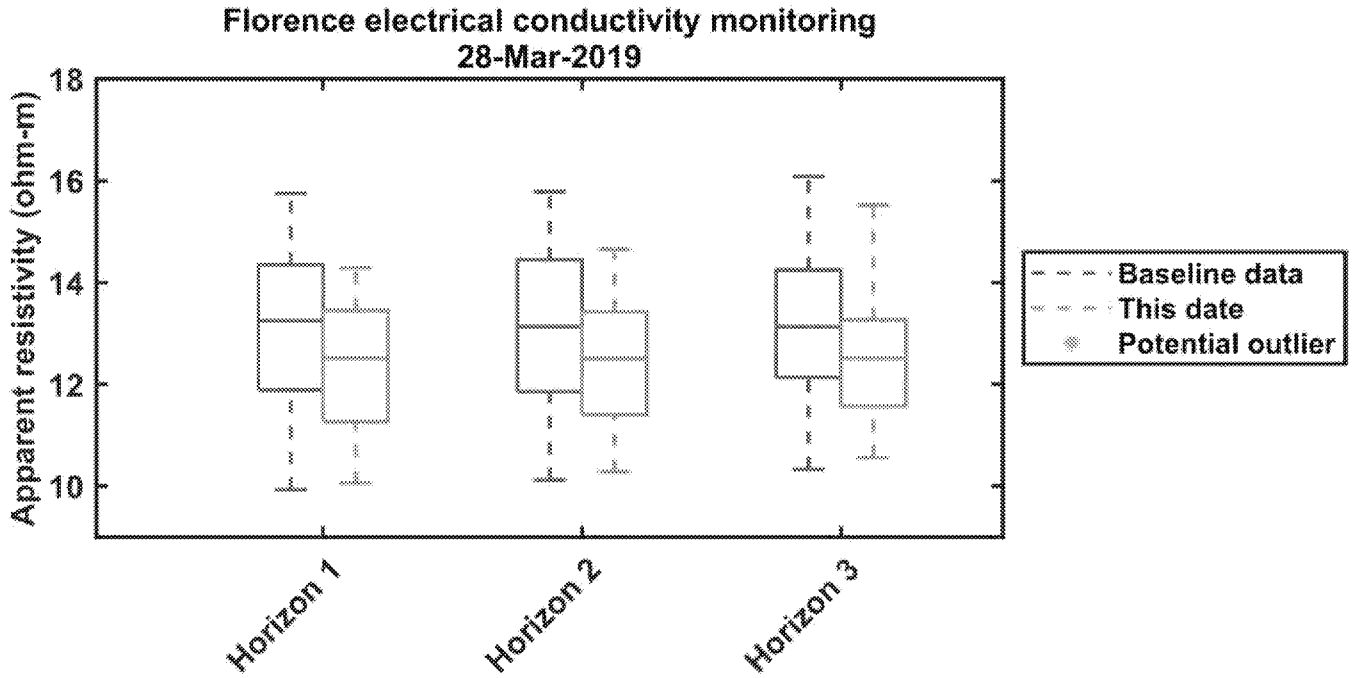

Florence electrical conductivity monitoring
21-Feb-2019
Apparent resistivity (ohm-m)
18
16
14
12
10
Horizon 1
Horizon 2
Horizon 3
Baseline data
This date
Potential outlier


Florence electrical conductivity monitoring
28-Feb-2019
Apparent resistivity (ohm-m)
18
16
14
12
10
Horizon 1
Horizon 2
Horizon 3
Baseline data
This date
Potential outlier


Florence electrical conductivity monitoring
06-Mar-2019
Apparent resistivity (ohm-m)
18
16
14
12
10
Horizon 1
Horizon 2
Horizon 3
Baseline data
This date
Potential outlier

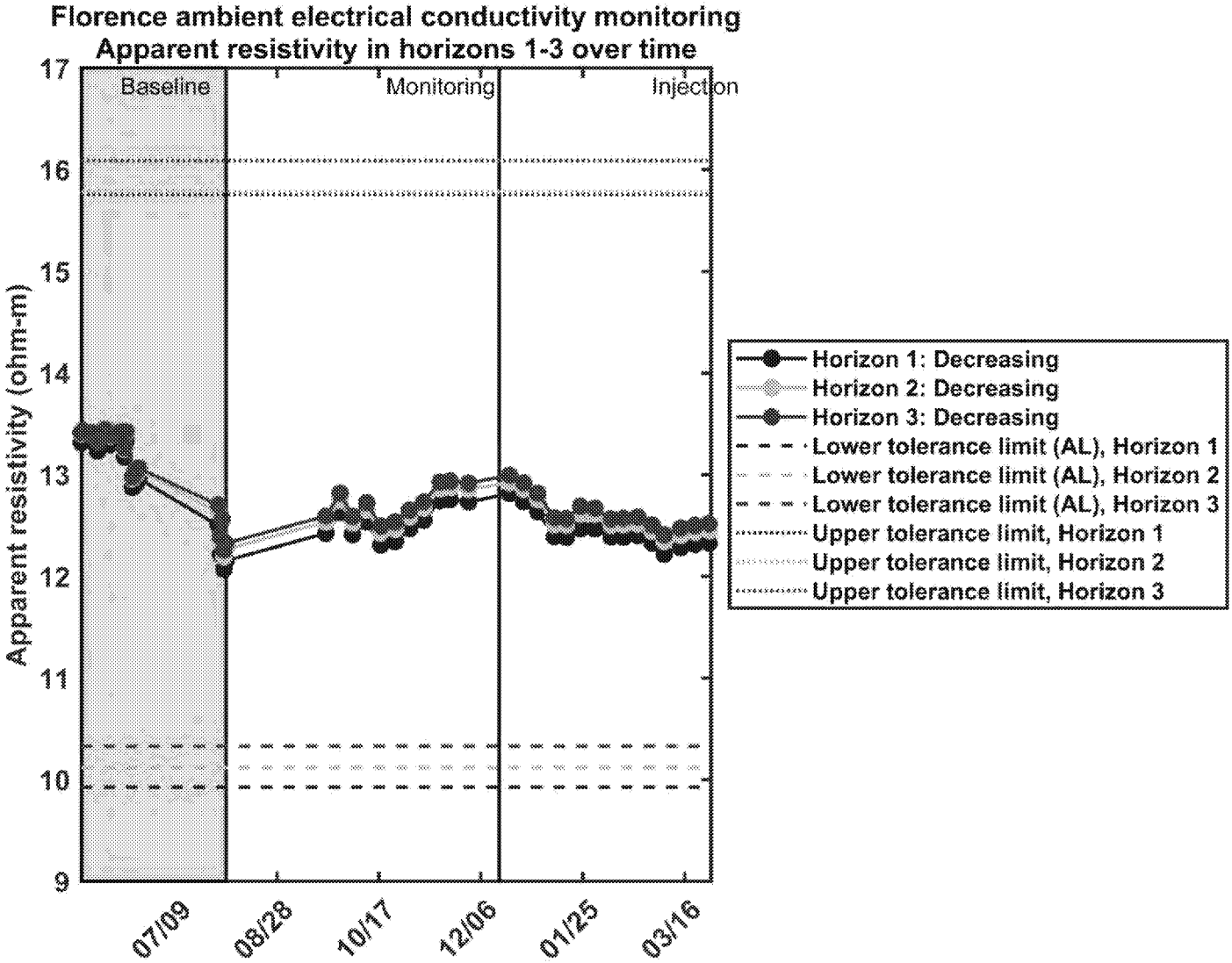

Florence electrical conductivity monitoring
14-Mar-2019
Apparent resistivity (ohm-m)
18
16
14
12
10
Horizon 1
Horizon 2
Horizon 3
Baseline data
This date
Potential outlier


Florence electrical conductivity monitoring
21-Mar-2019
Apparent resistivity (ohm-m)
18
16
14
12
10
Horizon 1
Horizon 2
Horizon 3
Baseline data
This date
Potential outlier


Florence electrical conductivity monitoring
28-Mar-2019
Apparent resistivity (ohm-m)
18
16
14
12
10
Horizon 1
Horizon 2
Horizon 3
Baseline data
This date
Potential outlier

ATTACHMENT B

Summary Plot of Bulk Electrical Conductivity


Florence ambient electrical conductivity monitoring
Apparent resistivity in horizons 1-3 over time
Baseline
Monitoring
Injection
Apparent resistivity (ohm-m)
17
16
15
14
13
12
11
10
9
07/09
08/28
10/17
12/06
01/25
03/16
Horizon 1: Decreasing
Horizon 2: Decreasing
Horizon 3: Decreasing
Lower tolerance limit (AL), Horizon 1
Lower tolerance limit (AL), Horizon 2
Lower tolerance limit (AL), Horizon 3
Upper tolerance limit, Horizon 1
Upper tolerance limit, Horizon 2
Upper tolerance limit, Horizon 3

ATTACHMENT D

Table 3-1
Cone of Depression Barrier

Table 3-1. Cone of Depression Barrier

Pumping Rate (gpm) Net Extraction Distributed Across Entire Well Field	Time Period (days)	Layer 5 (LBFU)			Layer 6 (Exclusion Zone)		
		Minimum Drawdown at PMA Boundary (feet)	Maximum Drawdown at PMA Boundary (feet)	Minimum Distance 0.05 foot Drawdown Contour Beyond the PMA Boundary (feet)	Minimum Drawdown at PMA Boundary (feet)	Maximum Drawdown at PMA Boundary (feet)	Minimum Distance 0.05 foot Drawdown Contour Beyond the PMA Boundary (feet)
60	30	0.422	0.832	2919	0.507	1.040	2923
60	60	0.448	0.857	3185	0.537	1.060	3188
60	90	0.466	0.870	3432	0.550	1.070	3434
60	180	0.500	0.906	4001	0.585	1.110	4001
60	395	0.556	0.960	4186	0.640	1.160	4785
60	545	0.585	0.991	4204	0.670	1.200	4793
60	790	0.622	1.030	4219	0.707	1.230	4799
24	30	0.168	0.327	2139	0.202	0.411	2145
24	60	0.179	0.341	2337	0.213	0.423	2338
24	90	0.185	0.347	2441	0.219	0.430	2444
24	180	0.201	0.364	2881	0.236	0.445	2879
24	395	0.221	0.385	3363	0.257	0.467	3368
24	545	0.234	0.398	3725	0.269	0.480	3725
24	790	0.251	0.414	4147	0.286	0.494	4383
12	30	0.082	0.164	1083	0.098	0.204	1308
12	60	0.089	0.170	1450	0.107	0.211	1453
12	90	0.092	0.173	1519	0.109	0.213	1520
12	180	0.101	0.182	1766	0.118	0.223	1764
12	395	0.112	0.194	2159	0.129	0.235	2163
12	545	0.119	0.200	2388	0.135	0.241	2388
12	790	0.127	0.208	2775	0.144	0.249	2777
7.5	30	0.051	0.101	21	0.061	0.126	347
7.5	60	0.055	0.106	179	0.067	0.132	474
7.5	90	0.057	0.108	250	0.068	0.133	530
7.5	180	0.064	0.114	587	0.074	0.139	794
7.5	395	0.071	0.122	1156	0.082	0.147	1286
7.5	545	0.078	0.130	1616	0.087	0.155	1620
7.5	790	0.079	0.130	1655	0.090	0.155	1658

ED_003025_00000414-00055

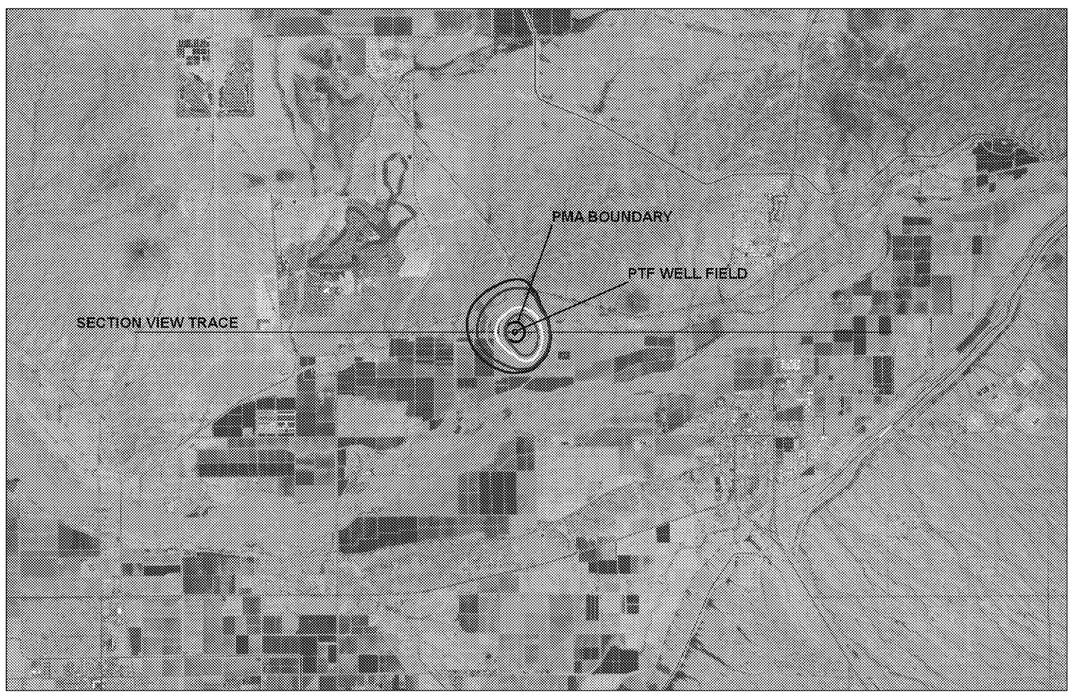
ATTACHMENT E

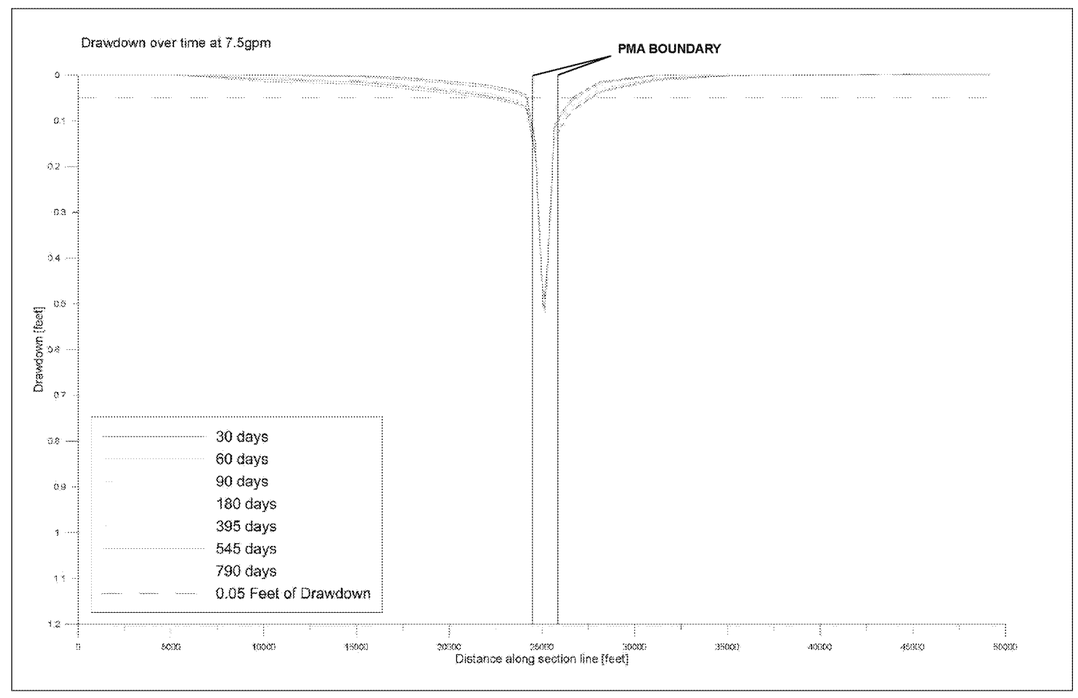
Figures 9-6
Cone of Depression Barrier in Model Layer 6

Plan View

Section View

7.5 gpm





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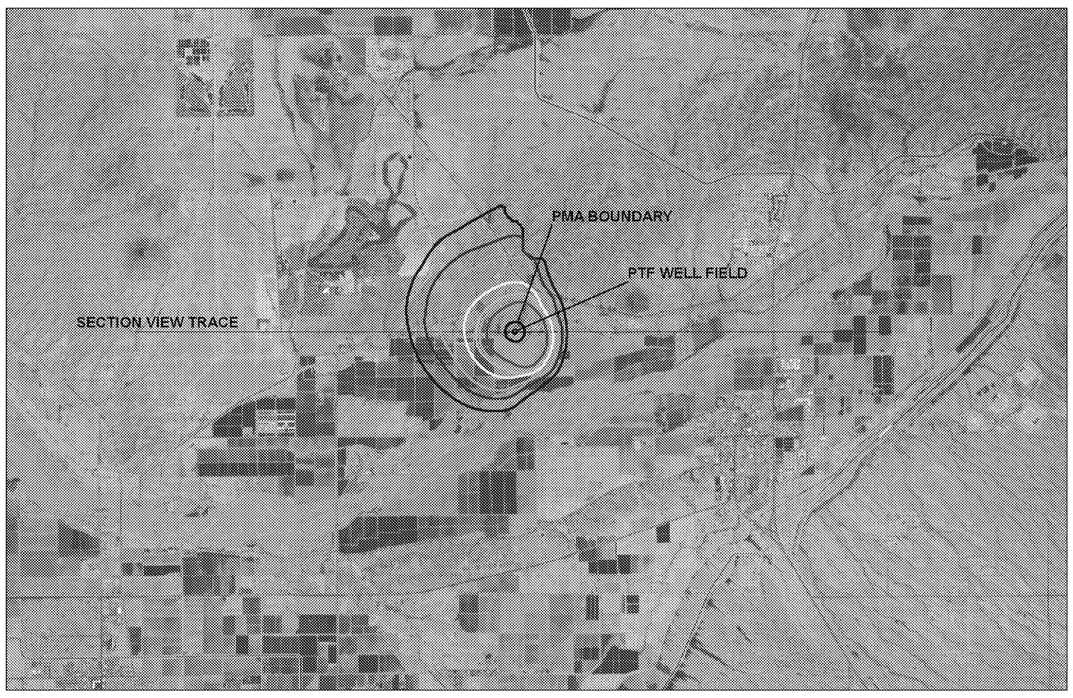

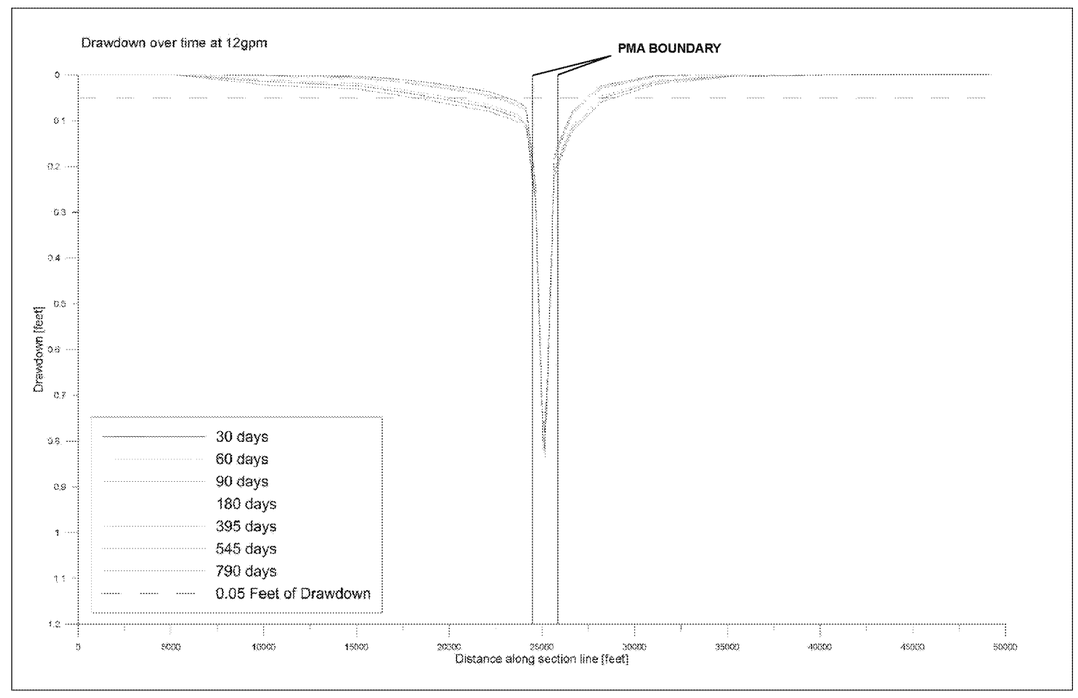

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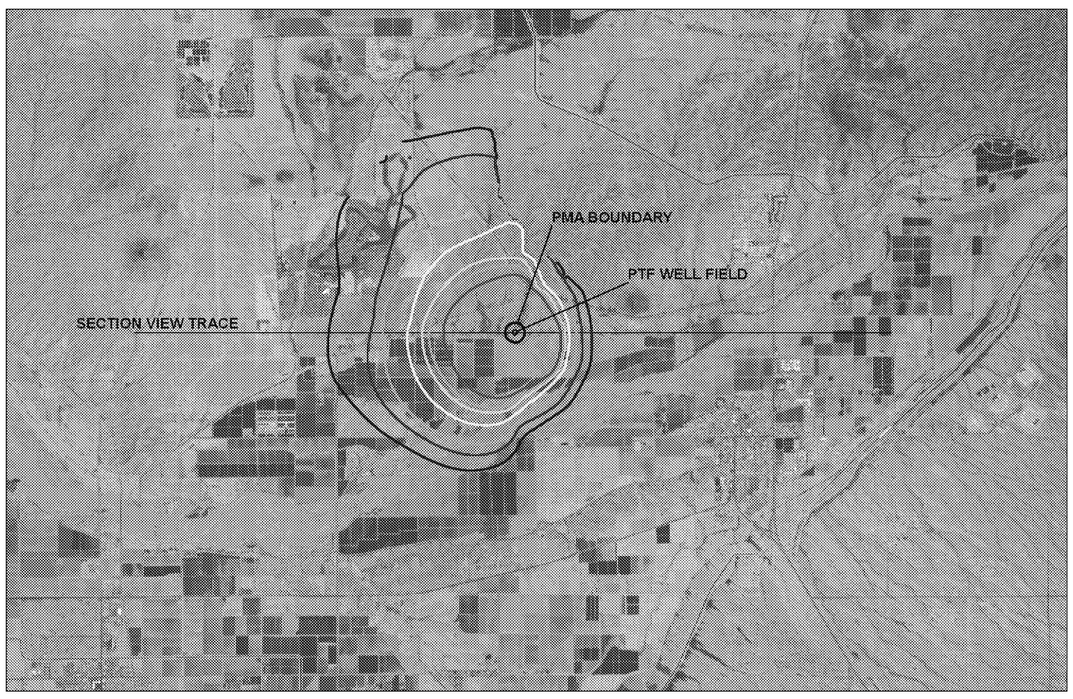

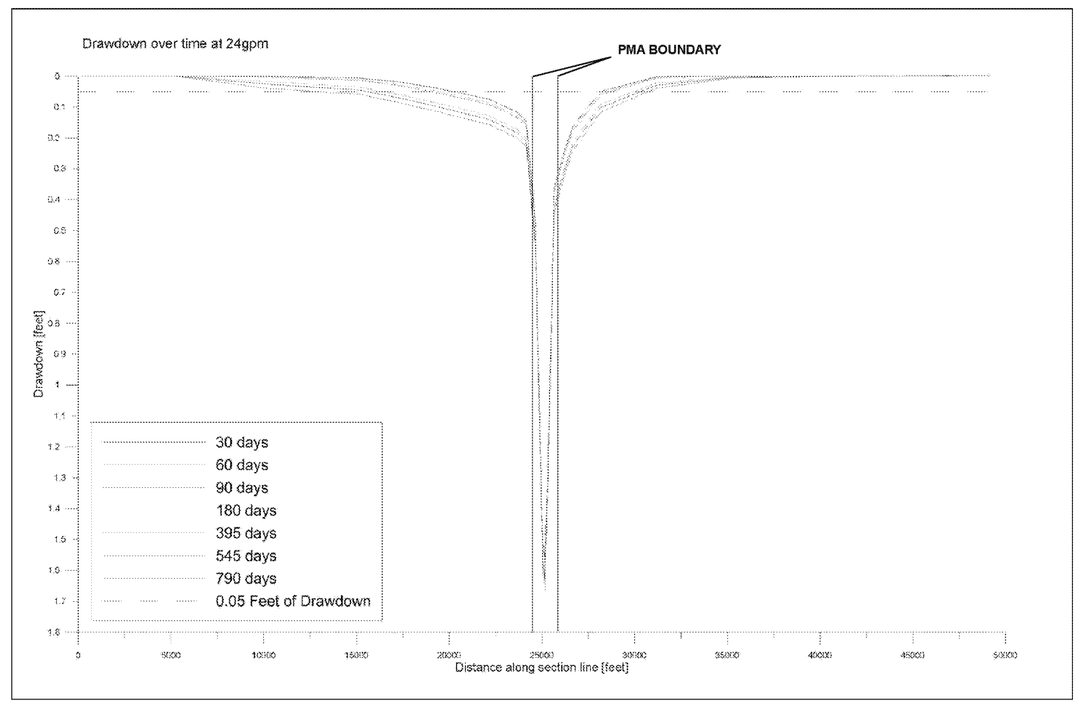

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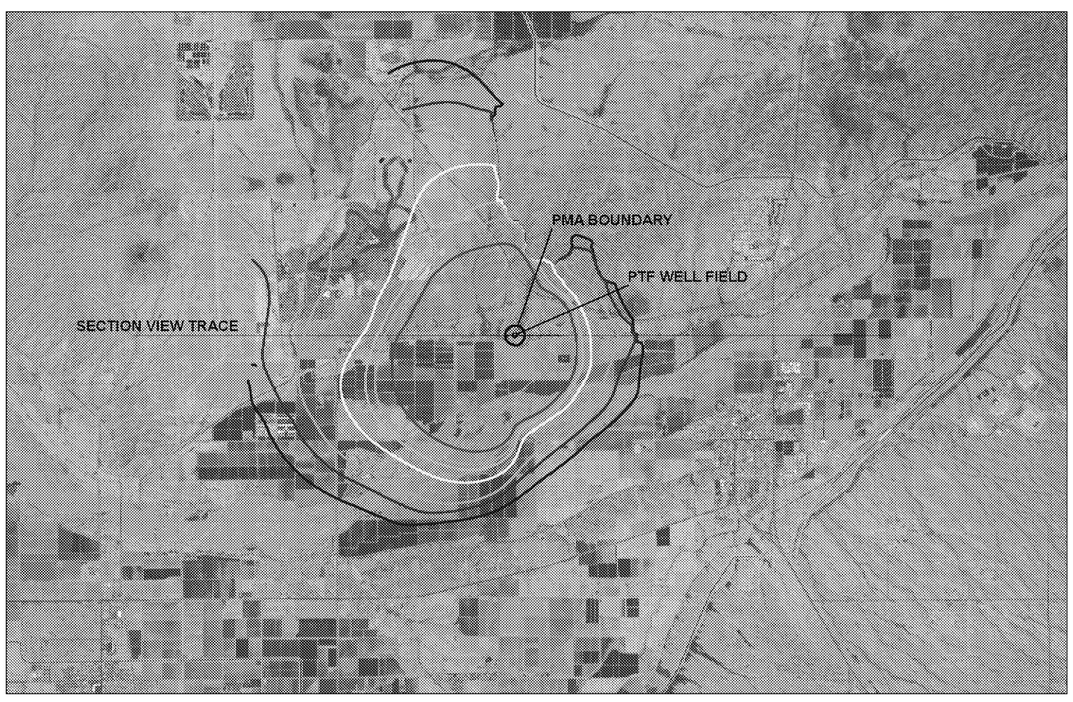
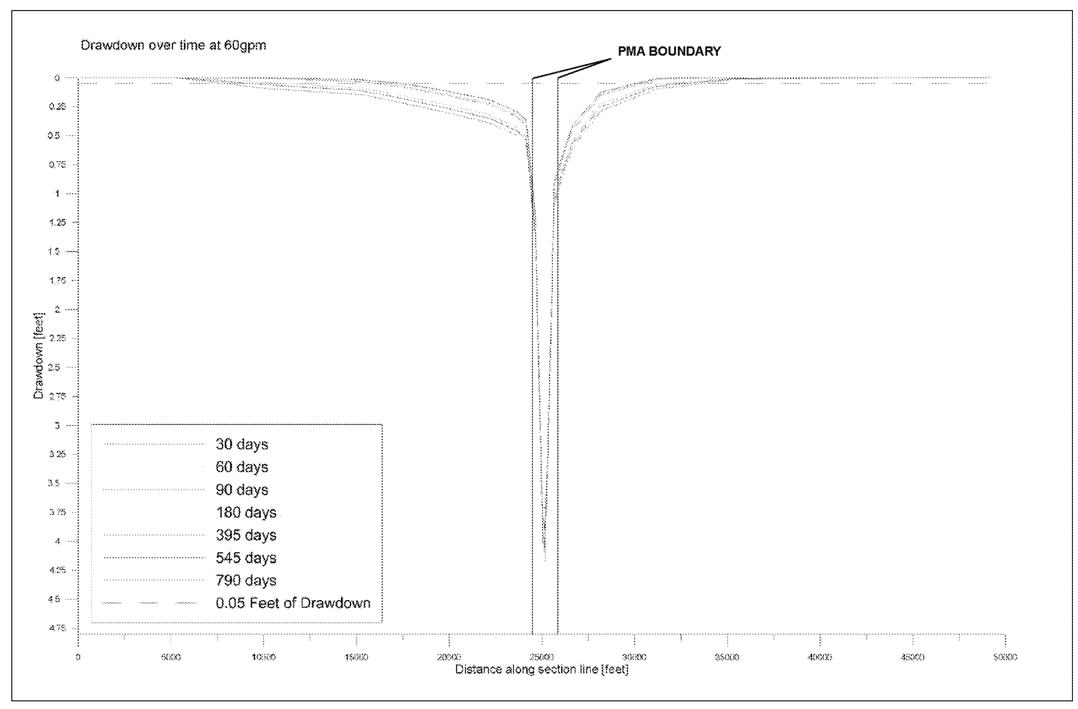




LEGEND

- 30 Days
- 60 Days
- 90 Days
- 180 Days
- 395 Days
- 545 Days
- 790 Days
- Cross-Section Line
- PMA Boundary
- PTF Well Field

NOTES

1. PLAN VIEW CONTOURS REPRESENT 0.05 FEET OF DRAWDOWN IN LAYER 5 FOR THE PUMPING RATE AND DURATION SHOWN.

2. SECTION VIEW REPRESENTS COMPOSITE DRAWDOWN IN LAYERS 5 THROUGH 10.

N

0 0.95 1.9 2.85 3.8
Miles

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

CONE OF DEPRESSION BARRIER
IN MODEL LAYER 5

FLORENCE COPPER INC.

SEPTEMBER 2015

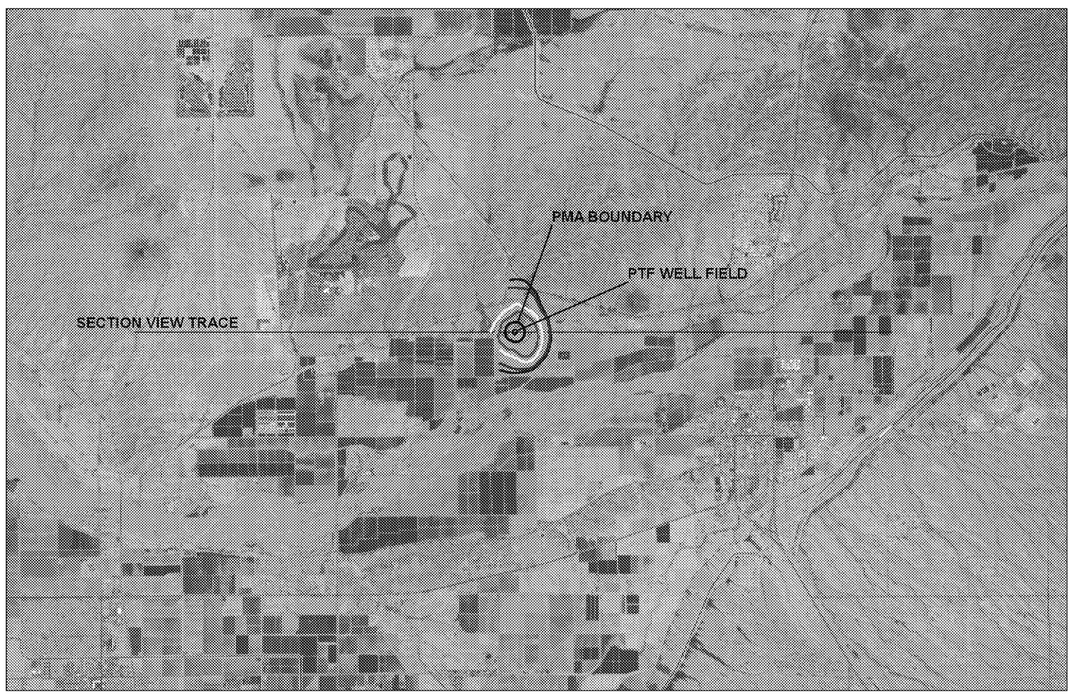
FIGURE 9-5

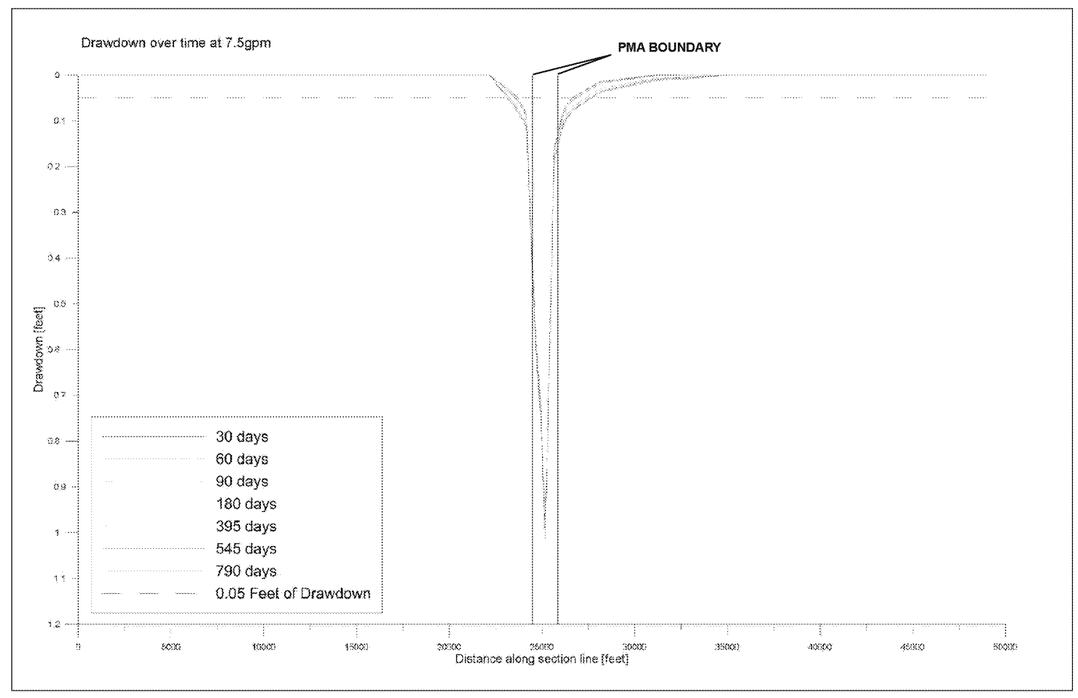
GIS FILE PATH: G:\Projects\Curis Resources\38706-Curis Feasibility\GIS\MXDs\Plate_Layer5_10.mxd — USER: bkienenberger — LAST SAVED: 9/4/2015 2:04:45 PM

Plan View

Section View

7.5 gpm





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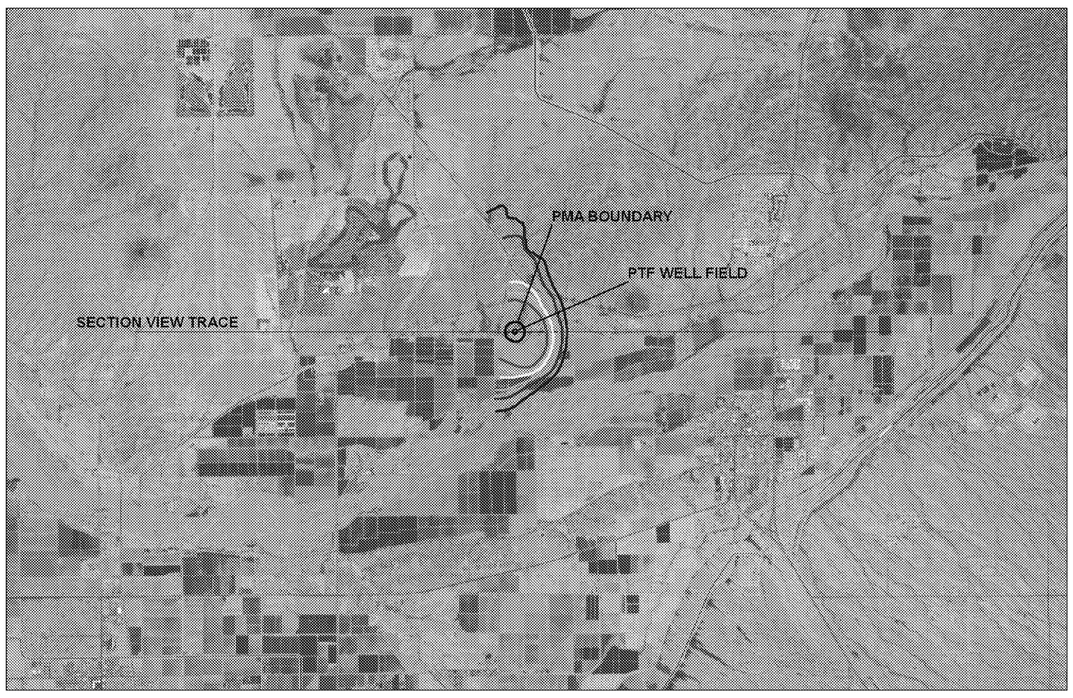

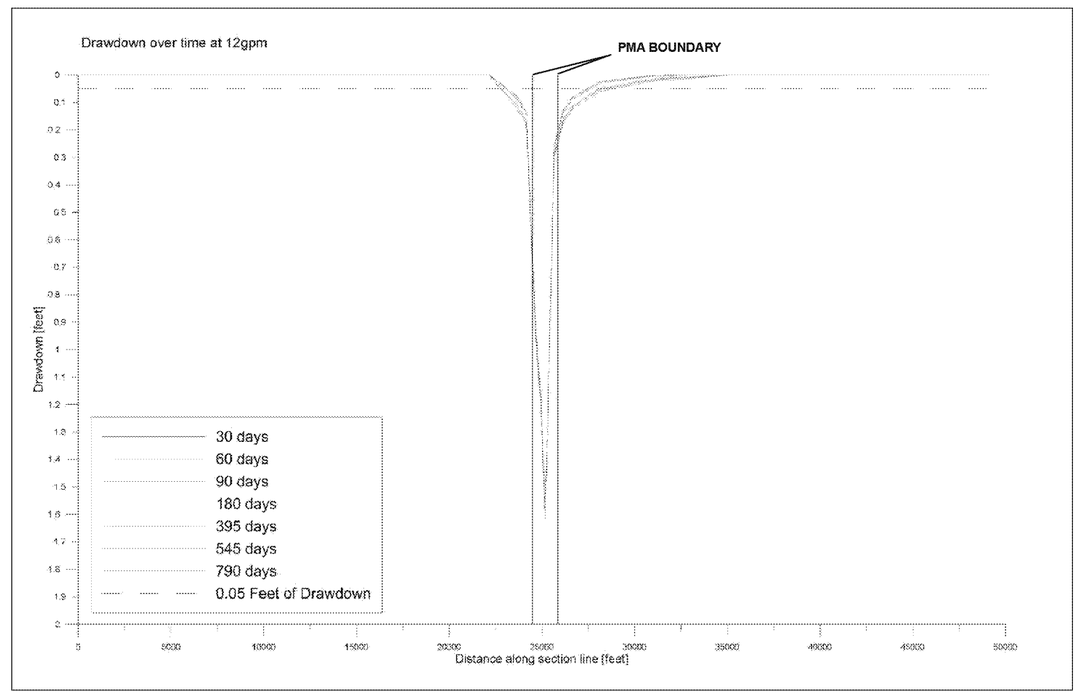

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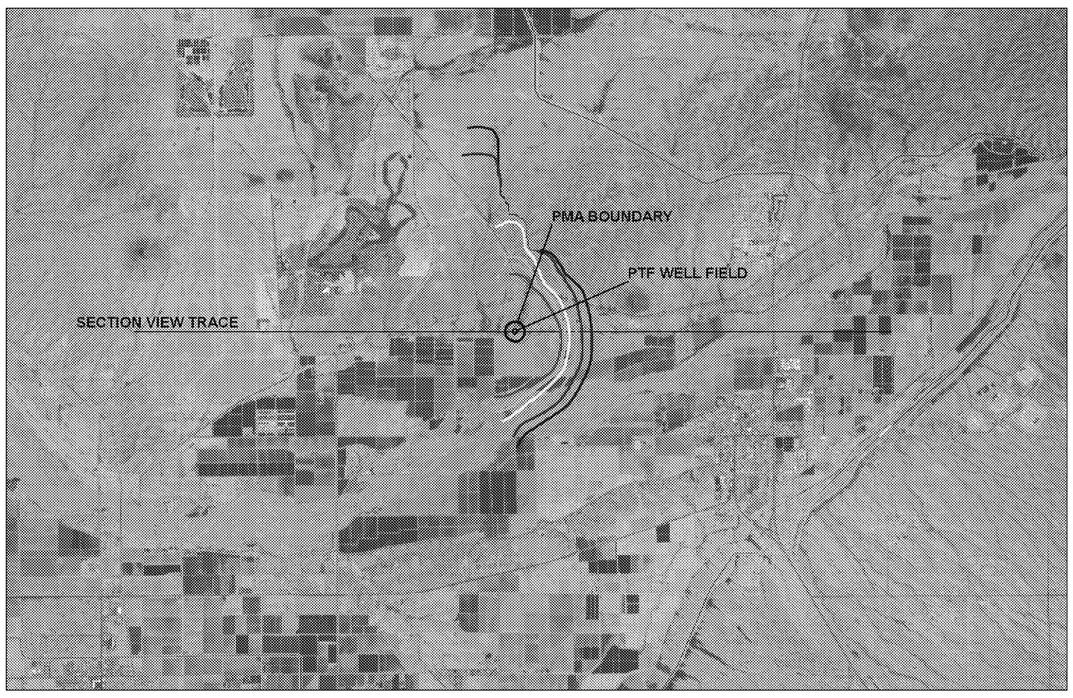

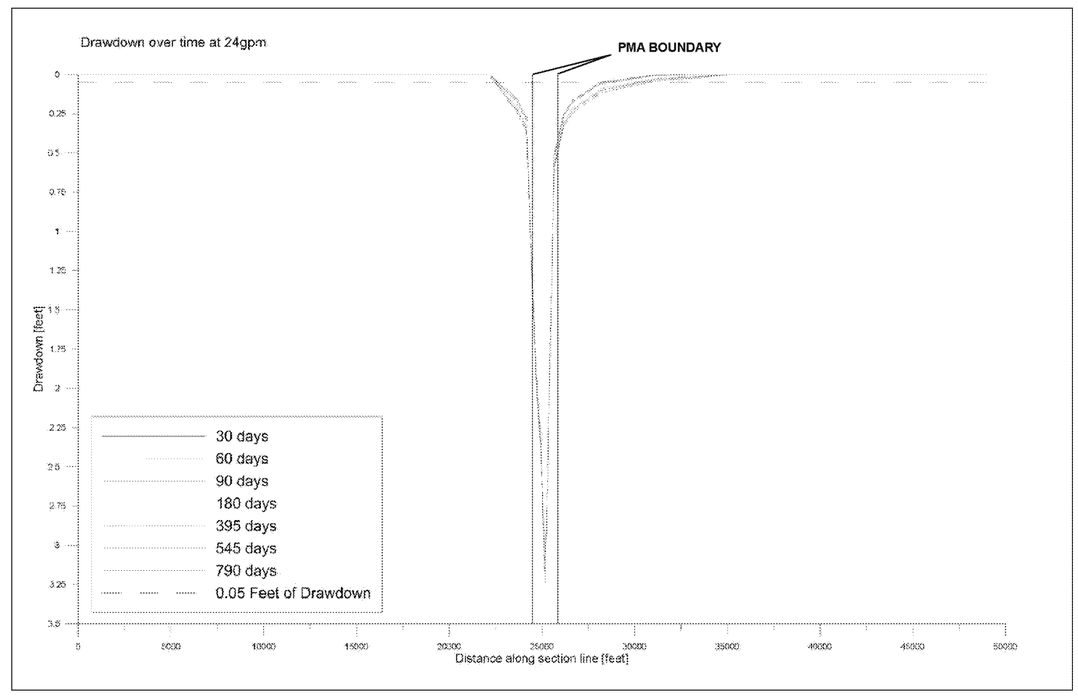

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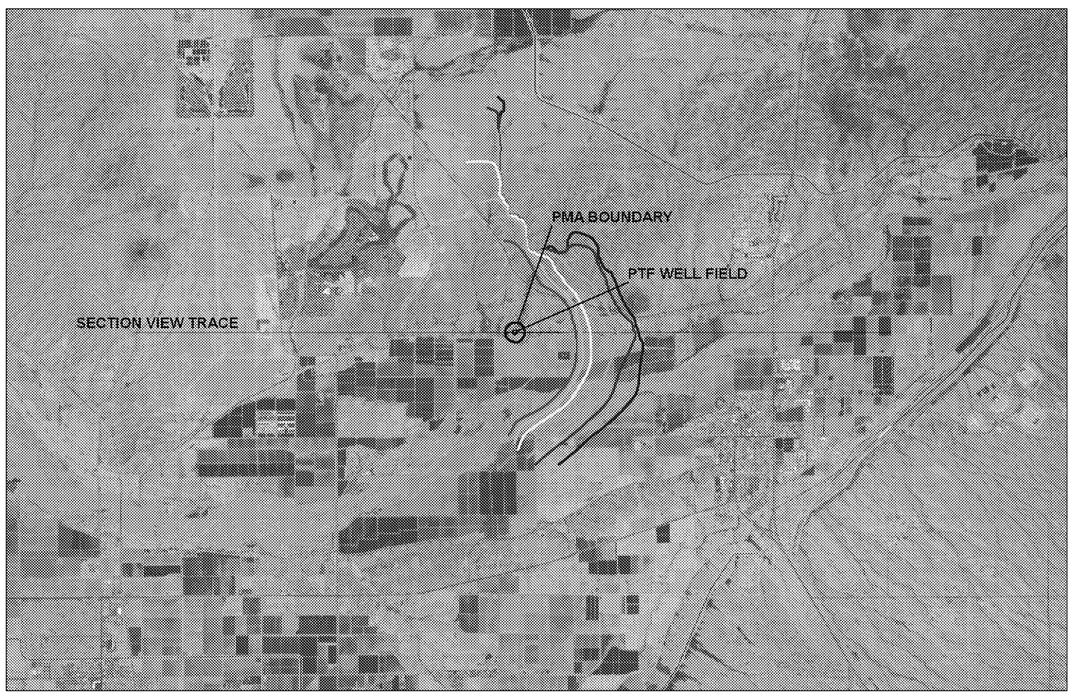

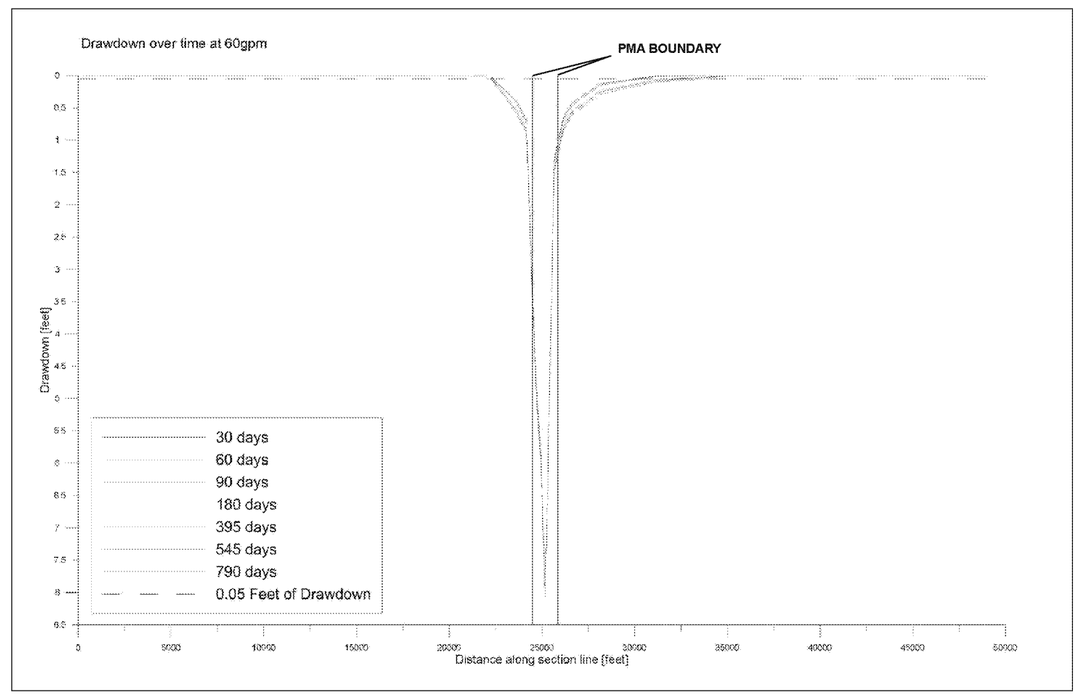

LEGEND

- 30 Days
- 60 Days
- 90 Days
- 180 Days
- 395 Days
- 545 Days
- 790 Days
- Section View Trace
- PMA Boundary
- PTF Well Field

NOTES

1. PLAN VIEW CONTOURS REPRESENT 0.05 FEET OF DRAWDOWN IN LAYER 6 FOR THE PUMPING RATE AND DURATION SHOWN.

2. SECTION VIEW REPRESENTS COMPOSITE DRAWDOWN IN LAYERS 6 THROUGH 10.

N

0 0.95 1.9 2.85 3.8
Miles

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

CONE OF DEPRESSION BARRIER
IN MODEL LAYER 6

FLORENCE COPPER INC.

SEPTEMBER 2015

FIGURE 9-6

GIS FILE PATH: G:\Projects\Curis Resources\38706-Curis Feasibility\GIS\MXDs\Plate_Layer6_10.mxd — USER: bkienenberger — LAST SAVED: 9/4/2015 2:08:01 PM