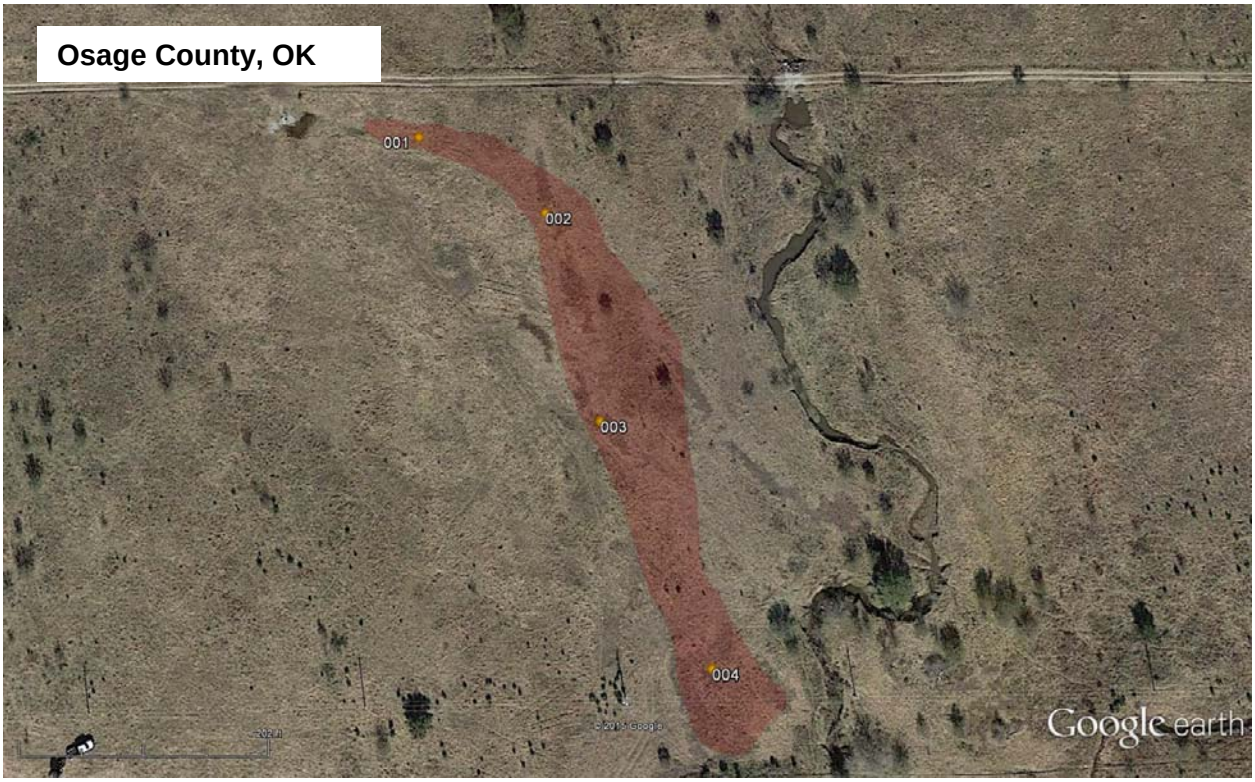
ENVIRO CLEAN SERVICES, L.L.C.

MicroBind Case Study – Osage County, OK

Timeline

5/15/12 – Collect initial samples to vertically/horizontally delineate impacted area

Site Map



5/15/12 Analytical Results		
Sample ID	**Depth (ft. bgs)**	**Total Soluble Salts Results (ppm)**
001	0	10,300
001A	1	1,290
001B	2	3,080
002	0	5,690
002A	1	1,870
002B	2	1,100
003	0	7,840
003A	1	780
004	0	7,170
004A	1	76.3
004B	2	717

**ft. bgs = feet below ground surface, ppm = parts per million*

Results indicated Total Soluble Salts (TSS) levels above the Oklahoma Corporation Commission (OCC's) action level of 2,640 ppm in Sample IDs 001, 001B, 002, 003, and 004.

5/24/12 – Perform remediation services:

- Till the impacted area
- Incorporate gypsum and manure into the surface of the impacted area
- Seed the impacted area
- Treat the impacted area with a MicroBind solution

9/19/13 – Collect confirmation sample from previous sample location

Comparison of Analytical Results from Pre and Post Remediation				
Sample ID	**Depth (ft. bgs)**	**Pre-Remediation Total Soluble Salts Results (ppm)**	**Post-Remediation Total Soluble Salts Results (ppm)**	**Δ Total Soluble Salts Results (ppm)**
003	0	7,840	2,470	-5,370

Analytical results indicated significant reductions in sample location 003. Full vegetative growth was noted at the time of sampling.

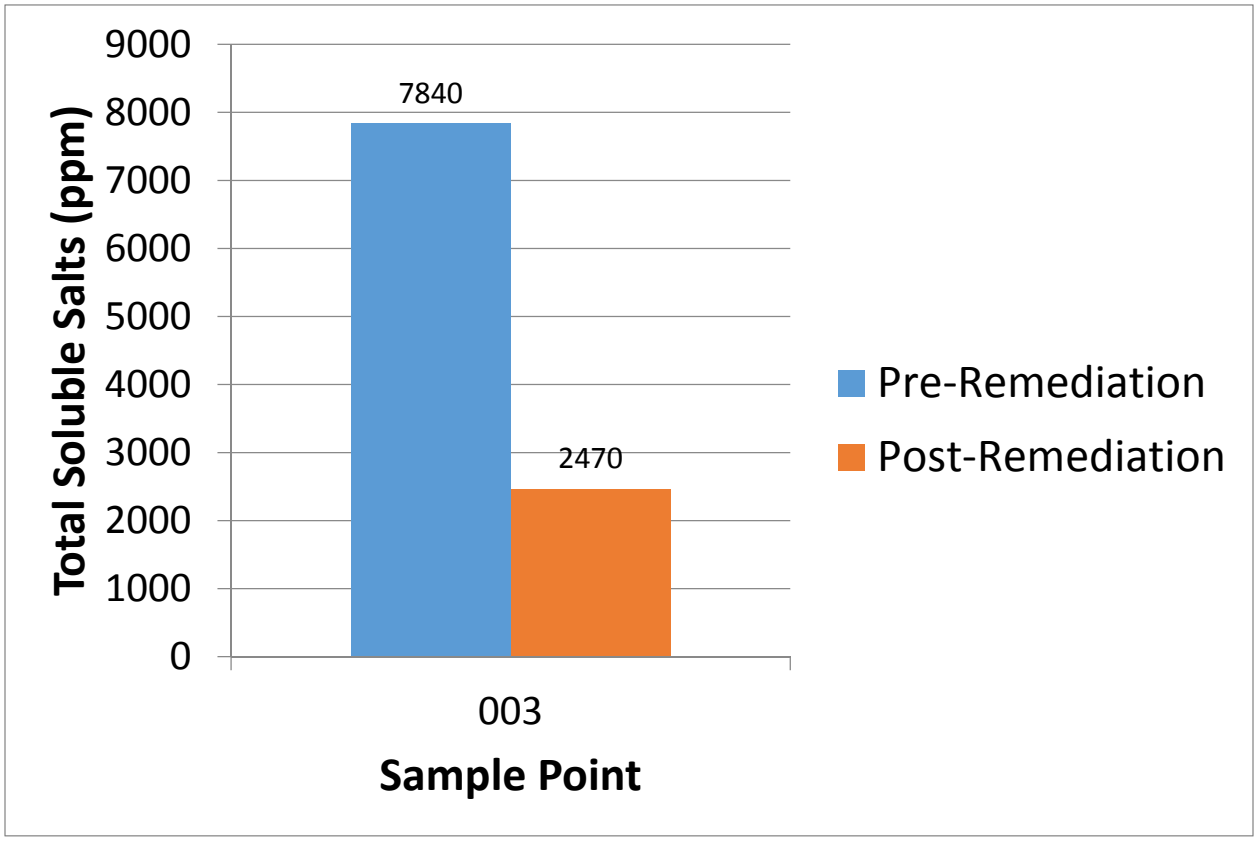


Figure 1: Comparison Graph of Pre and Post Remediation TSS Results

Photographic Documentation of Remediation:

Photograph 1: Pre-Remediation Impacted Area

Photograph 2: Pre-Remediation Impacted Area

Photograph 3: Pre-Remediation Impacted Area

Photograph 4: Pre-Remediation Impacted Area

Photograph 5: Impacted area after incorporation of manure

Photograph 6: Impacted area after incorporation of manure

Photograph 7: Impacted area after incorporation of gypsum

Photograph 8: Treating the impacted area with a MicroBind solution

Photograph 9: Treating the impacted area with a MicroBind solution

Photographic Documentation of Site at September 2013 Confirmation Sampling:

Photograph 10: Site 16 Months Post-Remediation

Photograph 11: Site 16 Months Post-Remediation

Photograph 12: Site 16 Months Post-Remediation

Photograph 13: Site 16 Months Post-Remediation