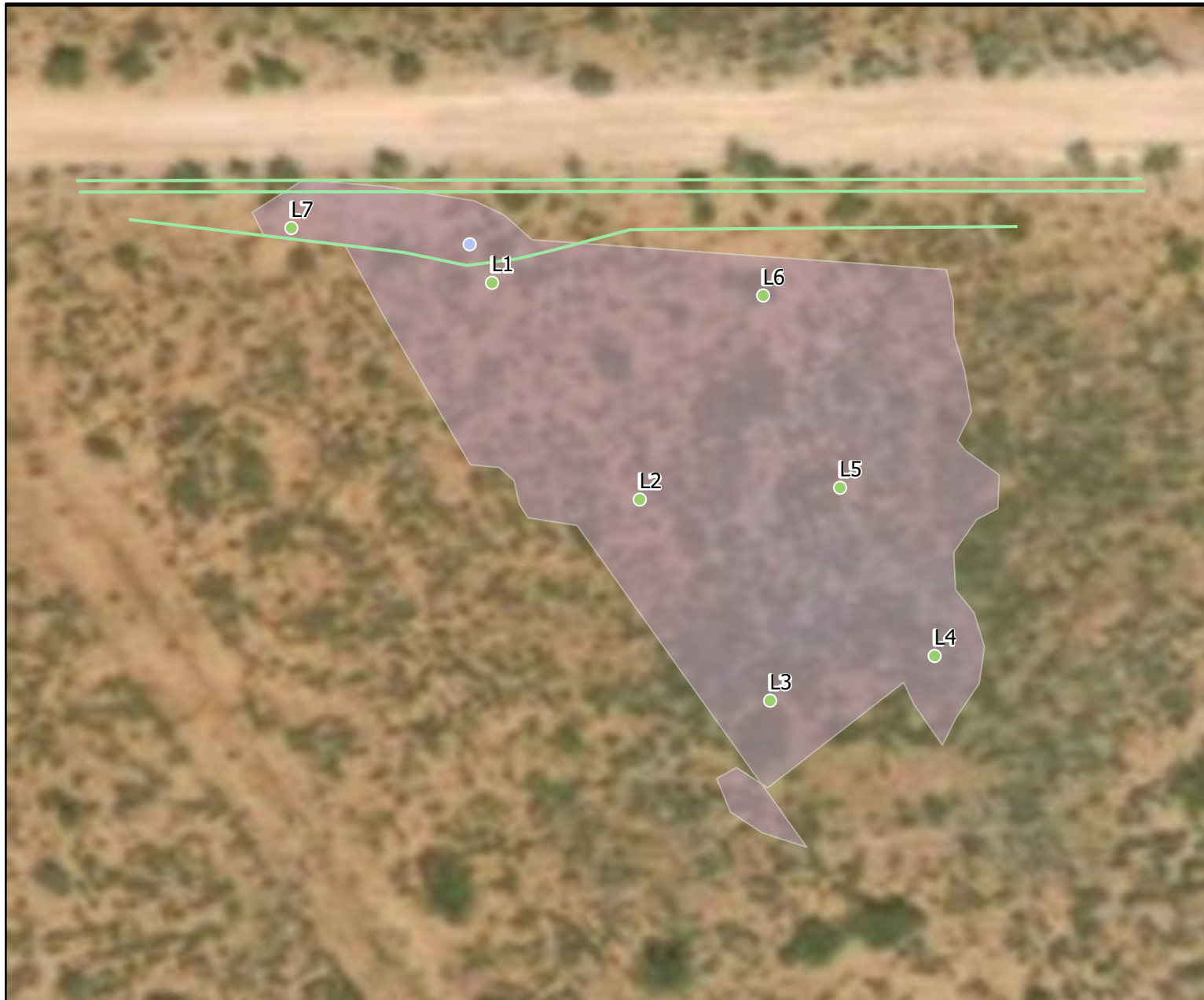


P:\5-XT0 2019 MSA On Call Services (6E27960)\GIS\ARCGIS\MISC_MIT.aprx



- Sample Locations
- Point of Release
- Flowlines
- Release Area



95
Feet

Site and Sample Locations
Cactus 167 Release
Eddy County, New Mexico

Figure 3

Revisions		
By: _____	Date: _____	Descr: _____
By: _____	Date: _____	Descr: _____
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Drawn	MRS
Date	6/7/2019
Checked	_____
Approved	_____



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Table 3:
Summary of Sample Results

Cactus 167 Flowline Release

Sample ID	Sample Date	Depth (feet bgs)	Cl- mg/Kg	Cl- Field Screens mg/Kg
NMOCD Closure Criteria				
L1	6/7/2019	0.5		10655
		1		9830
		2		11540
		3		12630
L2		0.5		8000
		1		8450
		2		11320
		3		13430
L3		0.5		8870
		1		9000
		2		13000
		3		2500
L4		0.5		9030
		1		10700
		2		3220
		2.5		2120
L5		0.5		2380
		1		900
		2		<130
		2.5		<130
L6		0.5		9570
		1		8300
		2		200
		3		<130
L7		0.5		6600
		1		11500
		2		5300

"--" = Not Analyzed

Equation (1) Inputs	$(L \times W) / 43560 \text{ sqft}$	Equation (1) Assumptions
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1 acre = 43560 sqft

Area Length (ft) Width (ft) 0.7200 Acres

Equation (2) Inputs	$K_{sat} \times 27,154 \text{ gal} / (42 \text{ gal})$	Equation (2) Assumptions
---------------------	--	--------------------------

1 acre/inch = 27,154 gal

Ksat 2 in Inches per hour located at <https://websoilsurvey.nrcs.usda.gov>

1 bbl = 42gal

1293.05 BBL/Acre/hr

Equation (3)	$(Eq2) \times (Eq1)$ Area adjusted volume
--------------	---

930.99 BBL/hr max

Equation (4) Inputs	$(Eq3) \times \text{release duration (hours)} + \text{recovered volume}$	Equation (4) Assumptions
---------------------	--	--------------------------

recovered fluids are not in
soil solution5 BBL0.083 Duration (hr)82.27 BBL

¹ infiltration rate. The rate at which water penetrates the surface of the soil at any given instant, usually expressed in inches per hour. The rate can be limited by the infiltration capacity of the soil or the rate at which water is applied at the surface: (National Soil Survey Handbook (USDA))

² (Ksat) Hydraulic Conductivity. (National Soil Survey Handbook (USDA)) conductivity is often referred to as coefficient of permeability, most commonly shortened to permeability