Appendix Site Photographs

Photos of Cuttings from Boring

Figure 1SP Cuttings from 0-24 feet are fine sand and silt typical of eolian deposits

Figure 2SP - Cuttings from 25-47 feet are sandy silt sized with a few angular fragments suggesting some cementation.

Figure 2SP - Cuttings from 48-60 feet similar grain size with redder color and more broken rock suggesting slightly more cementation.

Figure 3SP - Cuttings from 60-65 feet are silt size with broken fragments common, indicitive of cementation

Figure 4SP - Cuttings from 65-80 feet is silt sized grains with strong red color.

Photos of Former Fresh Water Frac Pond

Figure 5SP - View south from northwest corner of former fresh water frac pond excavation

Figure 6SP - View north from southern berm. There is no evidence of subsidence of the alluvial material or evidence of unstable ground...

Gully System East of Frac Pond Excavation

Figure 7SP - View southeast from southeast corner of excavation. Gully and possible headward erosion in center of image. While not a watercourse, the operator will provide erosion protection and divert stormwater to natural gulley east of proposed containment.

Figure 8SP - View east from eastern side of frac pond excavation. Google Earth images suggest this gully was caused by stormwater diversion from the frac pond. During construction of the containment, Solaris will install erosion control and stormwater diversion to mitigate western erosion of the gullies.

Figure 9SP - Gypsum on the ground surface due to weathering and erosioin of the bedrock.

Figure 10SP - Layered siltstone and red mudstone exposed in the gully east of the EKG containment location.

Figure 11SP - Close view of the siltstone and mudstone layers with obvious gypsum (32 11 19.81, -104 6 43.69)

Figure 12SP - View north showing head of large gully about 900 feet due east of EKG containment. Bedrock exposed within the gully is highly weathered and friable. A 12- to 18-inch thick red siltstone layer dips to the southeast in the upper right corner of this image underlain by beds of red siltstone and well-cemented siltstone/fine-grained sandstone. The 7.5 minute Malaga geologic map shows this unit as the Los Medanos Member of the Rustler Formation. We did not observe evidence of gypsum layers that are common in the Los Medanos. (32 11 22.04, -104 6 33.12)

Figure 13SP - View to the north, upstream from Figure 5SP. This image is a close-up of the exposure shown in Figure 5SP. (32.18967, -104.10931)

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CONDITIONS

Action 22767

CONDITIONS OF APPROVAL

Operator:			OGRID:	Action Number:	Action Type:
SOLARIS WATER MIDSTREAM, LLC	907 Tradewinds Blvd, Suite B	Midland, TX79706	371643	22767	C-147L

OCD Reviewer	Condition
vvenegas	None