Issue No:	DAPL Environmental Assesment Explanation of Issues
1	The finding of no significant impact (FONSI) for the crossing of Lake Oahe in a HDD tunnel 92' below the surface of the lake is a wrong conclusion presented by the DAPL EA and initially supported by USACE.
2	The DAPL EA EA was prepared with a pre-decisional intent and is a biased document that appears to have been prepared with the desired result known from the outset.
3	The DAPL EA lacks engineering integrity. The FONSI can neither be supported by previous precedent nor generally accepted industry practice and should be vacated immediately.
4	Not enough reasonable alternatives were seriously considered by DAPL to address the unresolved conflicts between stakeholders. In particular, routing alternatives.
5	The DAPL solution is the perfect technical storm and relies on the worst of all potential technical factors, including: (1) crude oil product (2) in a large-diameter pipeline and (3) in a 1.5 mile long HDD tunnel 92 feet below the surface of the lake.
6	So much emphasis was placed on following the existing Northern Border gas pipeline routing completed in 1983 that an alternative route further north that would have resulted in no major or minor river or lake crossings was not even contemplated.

	7	It is inappropriate to authorize DAPL to cross Lake Oahe as contemplated in the EA
		without further analysis, more rigorous exploration and analysis of siting
	,	alternatives. Accordingly, the USACE did not grant easement to cross Lake Oahe as
		contemplated based on the current record.
	8	Preparing a full Environmental Impact Statement is the best and most responsible
		recommendation at this stage given the level of conflict between stakeholders and
		fatal flaws thus far discovered resulting in an inadequate EA.
		the USACE have clearly sided with the obvious need for the tribal government
		leaders and representatives or experts to be granted the ability to review and
	9	respond to the critical documents that had been previously kept secret from the
		tribe. These documents are
		Lake Oahe Spill Model Discussion Report
		Lake Oahe HDD Risk Analysis Report
		DAPL Route Comparison.
	10	It is disappointing and troubling that these documents have still not been made
		available by DAPL to the tribes team of technical experts.
	11	The DAPL solution is the perfect technical storm and relies on the worst of all
		potential technical factors, including: (1) crude oil product (2) in a large-diameter
		pipeline and (3) in a 1.5 mile long HDD tunnel 92 feet below the surface of the
		lake.
	12	Without access to do a full technical review to evaluate further technical
		difficulties and based on what what was presented in the DAPL EA, there is no
		foundation that this is the least risk alternative or the finding of no significant
		environmental impact.
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	13	The business interests of DAPL have compromised the integrity and responsibility
		of the engineers responsible for the DAPL project.
	14	The selection of the route was not based on the route posing the least risk
		alternative and that alone should be reason to support the need for a full review as
		contemplated by the USACE memo of December 4th.
	15	It has become well known that DAPL has negotiated commercial off-take
		agreements that required the pipelines commercial operation by January 1, 2017.
		It should be investigated further as to whether the routing recommended was
		premature and may have been the fallout of DAPL's management desire to
		shorten the time to full commercial operation.
	16	The decision to recommend the routing under Lake Oahe appears to be the direct
		result of the heavy weighting DAPL applied to the requirement to follow the
		existing corridor in the questionable and subjective evaluation tables 2.1 and 2.2 in
		the EA. This was by far the dominating factor in the outcome of their analysis.
		Alternative objective routes should be evaluated.
		The results of the EA and the FONSI allowed USACE to prematurely issue the highly
	17	contested Section 408 permit. Unfortunately, the result led to the requirement to
		place the crossing at Lake Oahe.
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	18	What the EA failed to evaluate or even present was another alternative route even
		further North and East of the Missouri River that should have been evaluated. This
		alternative routing has no major or minor river or lake crossings and is actually
		shorter than the current DAPL proposed routing.

19	The key factor we would like to emphasize that the EA fails to discuss objectively is the fact that no similar application of a crude oil large diameter pipeline exists that crosses a freshwater lake via a large-diameter HDD tunnel anywhere in the World.
20	The DAPL solution is the perfect technical storm and relies on the worst of all potential technical factors, including: (1) crude oil product (2) in a large-diameter pipeline and (3) in a 1.5 mile long HDD tunnel 92 feet below the surface of the lake.
21	This design solution culminates in such an extreme high level of potential environmental and safety risk that an EIS is required because The EA does not currently address a leak or spill in the HDD section and full remediation of a clean-up of contaminated soil around the tunnel. Actually, clean-up of a spill in the HDD tunnel outside the pipe is a technical impossibility to perform.
22	Unfortunately, the worst in this case means that any leak or spill in the HDD section results in permanent and deep contamination to the surrounding soils 92' below the surface of the lake. Those contaminated soils will inevitably seep and poison the Hell Creek and Fox Hills aquifers and waters of Lake Oahe. The Hell Creek and Fox Hills formations are the major aquifers in the state and many residents depend on these formations for the water usage. These are regional aquifers for not only North Dakota but also other surrounding states.

	It appears placement of the HDD tunnel could not be any lower than the 92' section because it would have run into the Pierre Formation, a dark grey to black shale that has low strength and has the high risk potential for causing landslides.
23	Concerns about landslides have been presented by various local stakeholders as a significant project risk, including the Accufacts report prepared on behalf of the Standing Rock tribe dated October 28, 2016. The EA seems to support that this risk
	does not exist and we don't have enough information to credibly confirm or deny this at this time.
	It is a proven fact that significant pipeline leaks and spills do occur regularly cannot
24	be credibly denied. Project sponsors involved with this project thus far have
	completely ignored that the HDD crossing at Lake Oahe would become one of the
	rare examples of a perfect pipeline that never leaks or ruptures if it were to avoid soil and water contamination.
25	NEPA requires the best currently available technical data be used in impact
	assessment. There is no way to mitigate a leak or rupture from contaminating the
	soil and water if a leak should happen in the HDD tunnel 92' below the surface of
	the Lake.