

Suite101A, 957 Fir Street, Sherwood Park, AB T8A 4N6 • Office: (780) 416-2125 • Fax: (780) 416-2780 • Cell: (780) 910-3533 • Email: fyuzyk@kodiakeng.com

September 23, 2011

Mundle Anchors Ltd. P.O. Box 503 Rycroft, Alberta T0H 3A0

Attention:

Terry Mundle

Dear Terry,

Re:

Guy Line Anchor Lift Structure Analysis Results Kodiak Engineering Job Number: 11-08-7812-1

Please find the following results of the analysis performed on your guy line anchor lift structure. The analysis has been performed based on structural and dimensional information as provided by Mundle Anchors previously in Kodiak Engineering job number 04-06-2487. The anchors have been analyzed for a lift with a sling angle of 45 degrees. The sling attachment points are four (4) lugs installed at the ends of the HSS 6x6x0.250 frame on the anchor. The lift lug detail as analyzed is included as Kodiak Engineering drawing M6368-00.

The load application is based on American Petroleum Institute (API) RP 2A-WSD, Section 2.4.2 Lifting Forces. The structural acceptance criteria for the analysis is according to the American Institute of Steel Construction (AISC) handbook, Allowable Stress Design.

The analysis results indicate that the guy line anchor lift structure meets the allowable stress levels as defined by the AISC handbook for the load condition outlined above. As such, the guy line anchor lift structure is considered a safe operating structure when operated as follows:

- With a sling angle of no less than 45 degrees to the horizontal.
- With the lift lugs as per Kodiak Engineering drawing M6368-00.
- The analysis is based on the structure being in sound working condition.
- The total block weight is to be no more than 12,000 lbs on the anchor.
- Following an inspection schedule outlined by the Canadian Association of Oilwell Drilling Contractors (CAODC) Recommended Practice 3.0.

Please call me directly with any questions or concerns regarding the above information.

Regards, ENGINGERANK)

SEPT 23/1047

F.E. (Erank) Ruzyk, P.Eng.

PERMIT TO PRACTICE KODIAK ENGINEERING LTD.

Signature

Date SEPTEMBER 23 / 2011

PERMIT NUMBER: P 7518

The Association of Professional Engineers, Geologists and Geophysicists of Alberta

Drilling and Service Rig Design • Inspection and Certification Rig Component Design • Technical Reports



Suite101A, 957 Fir Street, Sherwood Park, AB T8A 4N6 • Office: (780) 416-2125 • Fax: (780) 416-2780 • Cell: (780) 910-3533 • Email: fyuzyk@kodiakeng.com

September 23, 2011

Mundle Anchors Ltd. P.O. Box 503 Rycroft, Alberta T0H 3A0

Attention:

Terry Mundle

Dear Terry,

Re:

Escape Line Anchor Lift Structure Analysis Results Kodiak Engineering Job Number: 11-08-7812-0

Please find the following results of the analysis performed on your escape line anchor lift structure. The analysis has been performed based on structural and dimensional information as provided by Mundle Anchors previously in Kodiak Engineering job number 08-06-5841. The anchors have been analyzed for a lift with a sling angle of 45 degrees. The load application is based on American Petroleum Institute (API) RP 2A-WSD, Section 2.4.2 Lifting Forces. The structural acceptance criteria for the analysis is according to the American Institute of Steel Construction (AISC) handbook, Allowable Stress Design.

The analysis results indicate that the escape line anchor lift structure meets the allowable stress levels as defined by the AISC handbook for the load condition outlined above. As such, the escape line anchor lift structure is considered a safe operating structure when operated as follows:

- With slings to the four outer corners, at a sling angle of no less than 45 degrees to the horizontal.
- The analysis is based on the structure being in sound working condition.
- The total block weight is to be no more than 4,000 lbs on the anchor.
- Following an inspection schedule outlined by the Canadian Association of Oilwell Drilling Contractors (CAODC) Recommended Practice 3.0.

Please call me directly with any questions or concerns regarding the above information.

Regards

F.E. (Frank) Yuzyk, P.Eng

PERMIT TO PRACTICE KODIAK ENGINEERING LTD.

Signature

Date SEPTEMBER 23/2011

PERMIT NUMBER: P 7518

The Association of Professional Engineers, Geologists and Geophysicists of Alberta