

EQUIPMENT No.	EQUIPMENT	XDR MUDTRAILER DESCRIPTION AND SPECIFICATION	EQUIPMENT OPTIONS
1.	Trailer Chassis	<ul style="list-style-type: none"> <li>Trailer chassis is engineered and supplied by XDR. It is designed to accept equipment and deflection loading. The chassis is mounted on a bi-axle air ride system and is complete with Wabco EBS braking system.</li> </ul>	
2.	Highway Equipment	<ul style="list-style-type: none"> <li>The Mud Trailer is complete with rear and clearance lighting, turn signals, wheel flaps, inner fenders, stop lights, backup alarm, reflectors and transport strobes as required. All light systems are installed and operate in accordance with the applicable ADR (Australian design regulation).</li> </ul>	
3.	Axles	<ul style="list-style-type: none"> <li>Dual axles;</li> <li>30,000kg GVM.</li> </ul>	
4.	Diesel Engine	<p>One (1) New CAT / CUMMINS OR EQUIVALANT :</p> <ul style="list-style-type: none"> <li>540-horse power at 2,100 RPM;</li> <li>Inlet shutoff valve;</li> <li>Copper Core ST9 high ambient radiator assembly with fan, guard and fan control;</li> <li>Complete gauge panel with gauges, switches and sensors;</li> <li>DDEC wiring harness;</li> <li>Electric starting;</li> <li>Engine mounted transmission oil cooler;</li> <li>Donaldson or equivalent air cleaner;</li> <li>Two 8D batteries installed with cables and connections in enclosure with Electrical lock out box installed;</li> <li>Delco 24V 140 Amp brushless alternator;</li> <li>Standard starter motor;</li> <li>Engine kill valve located at operator's control panel connected to a positive air shutoff valve mounted on the engine's air intake.</li> </ul>	<p>Engine can be replaced with a Volvo or Cummins engine with customer's agreement.</p>
5.	Transmission	<p>One (1) New Allison Model 4700 OFS or CAT equivalent:</p> <ul style="list-style-type: none"> <li>Built in torque converter with single output shaft;</li> <li>Transmission valve body configured to dual mode power shift;</li> <li>Transmission control module (TCM);</li> <li>Push button shift selectors for pump console thru PLC;</li> <li>Engine and transmission are mounted on top of carrier utilizing a three-(3) point mount for flexibility and easy removal.</li> </ul>	

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6.	Exhaust	<ul style="list-style-type: none"> <li>• Spark arresting muffler installed in engine enclosure;</li> <li>• Engine exhaust manifold, exhaust piping, turbo charger and spark arresting muffler are covered with a high-grade fiberglass to eliminate potential vapor ignitions while operating;</li> <li>• Exhaust exit is vertically through the roof and is equipped with a rain cap.</li> </ul>	
7.	Cooling System	<ul style="list-style-type: none"> <li>• One (1) front radiator mounted hydraulic cooling system. 24" x 30" c/w 2" NPT fittings hoses for full flow return cooling. 72 GPM capacity. Unit is complete with pressure relief valve and mesh guard protection. As designed by CAT C15 supplier.</li> </ul>	
8.	Fuel Tank	<ul style="list-style-type: none"> <li>• One (1) 490L capacity aluminum fuel tank.</li> </ul>	
9.	Engine Mounting	<ul style="list-style-type: none"> <li>• Engine to be mounted in an enclosure to ensure safe and quiet operation;</li> <li>• Enclosure includes noise reducing materials to reduce operating noise;</li> <li>• Air flow baffles installed in enclosure to ensure adequate engine cooling;</li> </ul>	
10.	Triplex Pump	<ul style="list-style-type: none"> <li>• Jereh 600s OR Equivalent horizontal triplex plunger pump 4.5" plungers;</li> <li>• Suction mounted pulsation damper as per manufacturer's instructions.</li> </ul>	Plunger diameter as per Customers requirements.
11.	Charge Pumps	<ul style="list-style-type: none"> <li>• One (1) 11Kw 415V charge pump. The discharge manifold is configured for 100% redundancy if one of the centrifugal pumps fails;</li> </ul> <p>Note: The charge pump and transfer/mix pump are connected on the same manifold and can be changed over by changing the valve sequence.</p>	
12.	Transfer/Mix Pump	<ul style="list-style-type: none"> <li>• One (1) 11Kw 415V charge pump. Discharge manifold is configured for 100% redundancy if one of the centrifugal pumps fails;</li> </ul> <p>Note: Charge pump and transfer/mix pump are connected on the same manifold and can be changed over by changing the valve sequence.</p>	
13.	High Pressure Manifold	<ul style="list-style-type: none"> <li>• Manufactured using API Flanges;</li> <li>• Swing type check valve;</li> <li>• Digital Pressure Gauge and Sensor;</li> <li>• Pulsation Damper;</li> <li>• Oteco shear type pressure relief valve.</li> </ul>	

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14.	Choke Manifold	<ul style="list-style-type: none"> <li>• Frame mounted eight (8) (Valves 2" x 5000 P.S.I. working pressure, one (1) choke valve, reverse circulating manifold, Valves are manually rotated. The valves will be slab gate API 6A certified, bi directional.</li> </ul>	Choke manifold can be manufactured to customer's specifications and layout if requested.
15.	Suction Piping	<ul style="list-style-type: none"> <li>• 6in suction piping to onboard charge and transfer/mix pump;</li> <li>• 4in outlets on both tanks for external pumps if required.</li> </ul>	
16.	Mud Tank	<ul style="list-style-type: none"> <li>• Tank Dimensions: Length 6m x Width 2.4m x Height 2.5m;</li> <li>• All internal surfaces are polymer lined;</li> <li>• Main Tank Capacity: 140 BBL; <ul style="list-style-type: none"> <li>○ Two (2) 6in suction outlets for charge and transfer/mix pumps;</li> <li>○ Two (2) 4in external suction/fill outlets;</li> <li>○ One (1) 4in drain/cleaning port.</li> </ul> </li> <li>• Pill Tank Capacity 60 BBL; <ul style="list-style-type: none"> <li>○ One (1) 6in suction outlet for charge and transfer/mix pumps;</li> <li>○ Two (2) 4in external suction/fill outlets ;</li> <li>○ One (1) 4in drain/cleaning port.</li> </ul> </li> <li>• Permanent tank top platform within transport height requirements. Compliant with AS1657;</li> <li>• Non-slip grating used to prevent water build up and reduce the risk of slip injuries;</li> <li>• Pallet storage on rear tank floor with direct access to mixing hopper;</li> <li>• Davit arm sockets installed in tank platform to allow for safe access to confined space in tank.</li> </ul>	
17.	Mud Tank Equipment	<ul style="list-style-type: none"> <li>• Mud Guns; <ul style="list-style-type: none"> <li>○ Two (2) Mud guns mounted in the Main Tank;</li> <li>○ One (1) Mud gun mounted in the Pill Tank.</li> </ul> </li> <li>• 2.2 Kw IECEx Zone 2 rated agitators; <ul style="list-style-type: none"> <li>○ One (1) mounted in each tank.</li> </ul> </li> <li>• Venturi type Mud Mixer/Hopper;</li> <li>• IECEx rated ultrasonic or equivalent tank level sensors;</li> <li>• One (1) mounted in each tank.</li> </ul>	

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18.	Control System	<ul style="list-style-type: none"> <li>• Full PLC Control of mud pump system;               <ul style="list-style-type: none"> <li>○ Operator's set points for flow and pressure requirements;</li> <li>○ Digital readouts for charge pressure, discharge pressure and discharge flow rate;</li> <li>○ Digital readouts for Main Tank and Pill Tank levels</li> <li>○ Electronic stroke counter.</li> </ul> </li> <li>• Can be controlled remotely from the XDR150 rig during operations.</li> </ul>	
19.	Hydraulics System	<ul style="list-style-type: none"> <li>• One (1) 24V Electric-Hydraulic Power Pack for setup/pack up operations;</li> <li>• Six (6) manual hydraulic steadies with mechanical locking devices to ensure safe operation of the mud trailer when the tank is full;</li> <li>• Two (2) manual hydraulically actuated platforms;</li> <li>• One (1) hydraulically actuated light tower.</li> </ul>	
20.	Electrics/Lights	<ul style="list-style-type: none"> <li>• 415V electrical supply for charge pumps;</li> <li>• 240V electrical supply for Mud Trailer control panel;</li> <li>• All lights are 24V;               <ul style="list-style-type: none"> <li>○ Two (2) lights mounted above engine area for operations and maintenance;</li> <li>○ One (1) light including emergency backup mounted over operator's area and stairs;</li> <li>○ Four (4) LED floodlights mounted on hydraulically actuated light tower. Height of lights from ground is 7.9m;</li> <li>○ Two (2) LED floodlights mounted on manually actuated light tower above the mud tank. Height of lights from top of tank is 3.1m.</li> </ul> </li> </ul>	
21.	Operators Area	<ul style="list-style-type: none"> <li>• Control desk and operating area mounted under roof to provide shelter for the operator;</li> <li>• Hydraulically operated platforms on all sides of engine and mud pump for complete maintenance and operational access at all times;</li> <li>• Platforms, handrails and stairs are all compliant with AS1657.</li> </ul>	
22.	Storage	<ul style="list-style-type: none"> <li>• Storage for additional hoses or tubulars;</li> <li>• Storage for tools and equipment.</li> </ul>	Customer to specify storage requirements. Not included in scope.
23.	Paint	<ul style="list-style-type: none"> <li>• All piping and unions to be painted to customer's specifications;               <ul style="list-style-type: none"> <li>○ Customer to supply Pipework Colour Coding Standard.</li> </ul> </li> <li>• Mud Trailer colour scheme open for Customer to decide.</li> </ul>	

