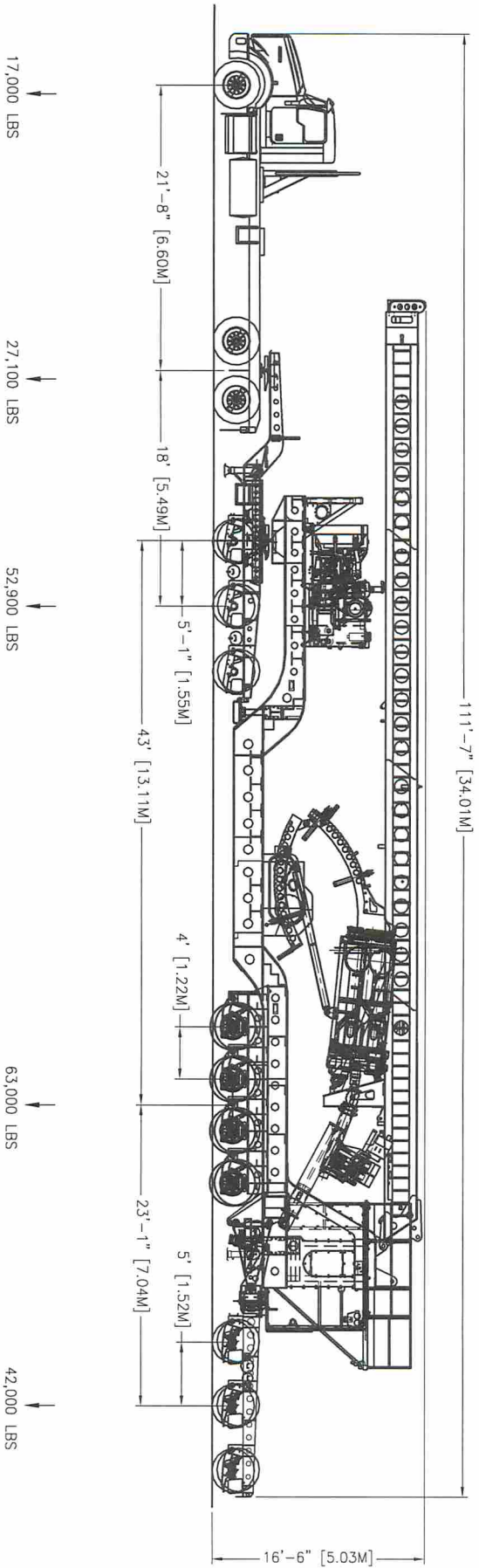
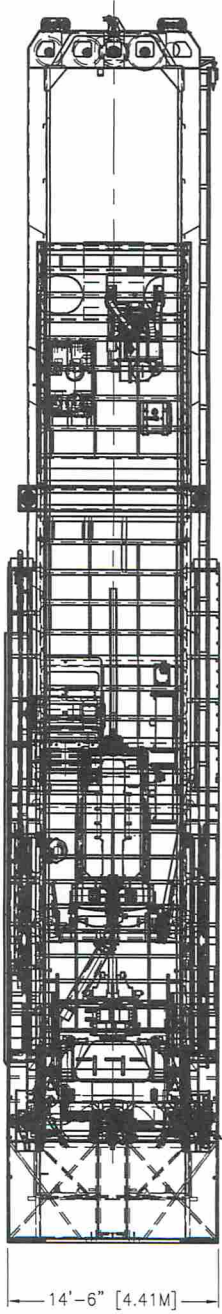


XTC 200/120 DTW

13MAR06

TRANSPORT MODE



DRILL RELEASE

CUSTOMER: X-Treme Coil
MODEL: CTR 2100 TL Coil Tubing Drilling Rig
DATE: January 6, 2006
SHIP DATE: Oct. 15, 2006
SERIAL NO.: 062458

Contract No. COC 8024-01-06AP (Xtreme Coil)

Dimensions

As per drawing TBA

Weights

Determined by Customer TBA

Capacity

TBA

Trailer Supplied By Customer

Configuration Suited for mounting of Foremost substructure and equipment

Weight TBA

Dimensions Approximate overall length 00' 00"

00' 00 " wide

18" ground clearance at mid trailer fully laden

Rear suspension TBA

Maximum rating of rear suspension is 00 tonne (000,000 lbs)

Wheel configuration TBA

Booster Hook-up provision for Booster - clamp on style for 00"

Jeep Sufficient in length for standard tandem or 16 wheel Jeep

King pin Weld in 2" SAE king pin

Front outriggers TBA

Midship outriggers TBA

Gooseneck Weld in 2" SAE king pin 56 inch fifth wheel height - unladen. Narrow dropped king pin structure to provide swing clearance for 16 wheel jeep. No provision for king pin extension, permanent gooseneck clearance for 16 wheel jeep.

Pick up throat Narrow

Axles (4) TBA

Brakes TBA

Hubs (8) TBA

Wheels (16) TBA

Tires (16) TBA

Mudflaps Continuous across rear of trailer

Air system CMVSS & FMVSS approved air system. Relay emergency 2 line system
all air lines are stainless wire braid

Electrical system CMVSS & FMVSS approved electrical system. Sealed modular electrical

system units Truck-lite sealed beam lights.

Mast rest TBA
Handrails TBA
Stairs TBA

Outriggers

Rear outriggers Two 7" (178mm) bore x 5" (127mm) rod x 48" (1.21m) stroke
provides 22" (560mm) ground penetration
Hydraulically locked w/secondary mechanical split wing nut locks
Two 48" (1.22m) x 17.5" (444mm) aluminum pontoons w/ball socket
retracts to provide 18" ground clearance
3000psi (20.68mpa) Max working pressures

Mast

Configuration Steel fabricated twin boom design. Single ladder on on drillers side
Ladder provides access from substructure from work floor to mast crown
Designed to accordance with API 4F
Hook load capacity At traveling block 200,000 lbs (88,00 DaN)
Injector 120,000 lbs (52,800 DaN)
Length capacity API Range III
Crown sheaves 24" dia composite sheaves for 1 1/8" cable
Fall arrestor SALA 3403501 (no harness)
Travel block Three sheave 100 ton (intergal with customer supplied top drive)
Mast raise cylinders 2 stage 9" (229mm) x 7 1/2" (191mm) bore
3000psi (20.68mpa) max working pressure
Double acting both stages
2" (51mm) pins greasable w/ crosspin and washer retainers
Top Drive travel 55 Ft 0 in (16.76m)
Crown saver Weighted block on dead line installed 4' from crown (customer supplied)

Injector Supplied by Customer

Make FDS (Supplied by customer)
Model FDS (Supplied by customer)
Drive group Rexroth bent axis piston motors – AV160 operating at 5,000 psi
Drive motors are supplied with customer supplied injector
Power group Denison P24 hydraulic pump
Maximum pull 120,000 lbs (52,800 DaN)
Snubbing capacity 40,000 lbs
Tubing speed 110 ft/min
Maximum tube size 3 1/2"
Load cell Double acting mounted in injector frame (customer supplied)
Depth counter Encoder provision (customer supplied)
Weight Weight not to exceed 16000 lbs

Gooseneck Supplied by Customer

Make FDS (Supplied by customer)
Model FDS (Supplied by customer)
Size 120" radius
Support rollers 3 1/2" composite
Hold down rollers 3 1/2" composite

Straightner Qty. 3 roller - 3 1/2" composite mechanically adjusted
Swivel 33 5/8" dia single row thrust bearing mount at base of gooseneck
hydraulic lock out pin for transport
Weight Weight not to exceed 1860 lbs

Lubricator

Type Two part telescopic tube sealed by inflatable rubber bladder
with intergal hinge and rubber bellows (150 PSI max sealing capacity)
StripperHydraulically actuated, mounted directly below injector head
Make Progressive Technologies
Capacity Pack off to 1000 psi @ 2500 psi hyd pressure
Size Supplied with 3 1/2" bushing

Engine

Model Cummins QSM11 400 hp @ 2100 rpm
Skid mounted to trailer with 3 point rubber isolator mounting
Full hood with sheetmetal fixed roof
Emmissions Tier 2
Radiator and CAC 115 deg F (46 degree C) ambient rating
Shutters ECM controled air operated fail safe open
Fan Crowley multi wing with air operated shutters on rad
Air cleaner Two stage with restriction indicator
Rig saver Roda Positive air shut off electric over air
Muffler Horizontally mounted
Alternator 24V 70 amp
Starter 24V
Fuel filter Spin on with water separator
Oil Filter Full flow with bypass filter engine mounted
Batteries Two 8D 1400 CCA
Battery warmer One 120V 60W
Air compressor 28 CFM
Air Dryer Bendix AD9
Air Tank 4 US gal (15 L) with maunual drain valve
Coolant heaters One Cummins 1500W Immersion type
One 4000W Kim hotstart Circulating 220V
One Temro oil Pan heater 220V
Coolant heat exchanger in hydraulic tank
Proheat 45,000 BTU Diesel fired coolant heater with manual on/off
toggle. Connected to in tank hydraulic tank heater and engine block
Hydraulic tank preheating required below 20 degrees C.
Control panel mounted at Non-keyed On/off
engine Start Button
Tach, Oil Pressure, voltmeter, coolant temp gauges
Indicator lights for low coolant, low oil pressure, high coolant temp
Throttle with local/remote toggle
Engine shutdown Engine ramps down on low coolant, low oil pressure, high eng oil temp,
high coolant temp, low hyd oil level, shutdowns 30 seconds after initial fault
Pump Drive Twin pad Funk 58000
Pumps Denison P24S 5000psi (34.47mpa) piston pump closed loop
Top drive / Injector

Rexroth A11VLO130 3000psi (20.68mpa) piston pump Open loop
Make/Break, Injector aux functions, Topdrive aux functions.
winches and set up functions
Rexroth A4VG piston pump
Storage reel
Denison T6C Single Vane pump 3000psi (20.68mpa) open loop
Cooler cooling

Hydraulic Tank

Steel tank deck mounted on rubber isolators
Split tank, 275US Gal (1038L) open loop, 135US Gal (505L) closed loop capacity
Two 14 in. (355 mm) top mounted clean out covers
One 10" sight gauge closed loop, 3 - 10" sight gauges open loop side
Butterfly type shutoff valves on suction ports
Hand operated transfer pump for filling through return filters
Arctic Fox internal heater for connection to external coolant heater
Temperature sender - one per side
Temperature switch 120 degree F (49 Degree C) - one per side
Two low oil senders per side at warning and shutdown levels
Non-pressurized breather - one per side
Tank mounted 250 gal/min (946 L/min) 10 micron return filters
1" (25mm) Npt Drain

Hydraulic Cooler

Type Qty 2 - remote mounted with A/C electrically driven fan
Customer to supply A/C power including controls and cables.
Mounting Rubber isolaters
Max ambient rating 45 deg C

Fuel tank

One 50 US Gal (189 L)
1 (25mm) npt connection for fill
FMVSS approved
Not suitable for connection to pressurized central fuel system

Winch General work

Model Rotzler
Cable 200 Ft. (70M) of 9/16 in (14.29 mm) dia cable
Hook 12,000 lb (5443Kg) swivel hook w/load lock
Line pull 7250 lb (3288kg) bare drum (theoretical)
5420 lb (2458 kg) full drum (theoretical)
Line speed 148 ft/min (45 M/min) bare drum (theoretical)
198 ft/min (60 M/min) full drum (theoretical)
Location Mast mounted to inside leg of mast near injector
Jib Fixed at well center. Crown mounted.
Brake Spring applied hydraulic release

Lubricator Winch

Model Rotzler

Cable 60 Ft. (18M) of 3/8 in (9.53 mm) dia cable

Hook 7100 lb (3220 Kg) sling hookclevis type

Line pull 2200 lb (998 kg) bare drum (theoretical) - hydraulically limited to 1500 lbs
1700 lb (771 kg) full drum (theoretical) - hydraulically limited to 1160 lbsLine speed 126 ft/min (68 M/min) bare drum (theoretical)
164 ft/min (50 M/min) full drum (theoretical)

Location Mounted underside of Injector base

Brake Spring applied hydraulic release

Substructure

Size Floor area approx. 12'9" X 14'

Capacity 200,000 lb. (91,000 kg)

Rotary Table Provision for customer supplied rotary table - 3000 psi - 30 gpm

Includes mounting and hydraulic plumbing - controls responsibility of customer

Iron Roughneck Provision for customer supplied iron roughneck - 3000 psi - 30 gpm

Includes mounting and hydraulic plumbing - controls responsibility of customer

Railings Steel handrails with kick plates around perimeter as required

Painted

Flooring Steel checker plate with traction paint

Sheeting Aluminum sheeting on exterior for winter operations.

BOP handling Qty 2 - non powered traveling dollies capable to support 10,000 lbs (4536 kg)

BOP

Does not travel to well center

Qty 2 - hydraulic cylinders to raise and lower BOP stack from well head

2 1/2" bore @ 3000 psi

Manual controls mounted in cellar

Qty 2 - 5/8 " cables with eye

Tong Cylinders Qty 2 - mounted vertically in mast legs

Qty 2 - hydraulic cylinders - single line pull 28,000 lbs (12,800 kg)

4" bore 2" rod cylinder

Main tong cable and back up cable provided

Counter weights Qty 2 - counter weights for make and break tong - weights mounted
inside mast

leg. 5/16" cable strung over mast crown to floor.

Rotary Table Supplied by customer

Model ENID Drill Systems Inc.

Static weight capacity 200,000 lbs (91,000 kg)

Rotating Weight Cap 200,000 lbs (91,000 kg) upto 50 RPM

Dimensions 81 cm X 122 cm X 24 cm (32" X 48" X 9 5/8")

Weight Table - 1,500 lbs. (680 kg)

Bushing - 320 lbs. (140 kg)

Round opening 42 cm (16 1/2 in.)

Drive square 47 cm (18 1/2 in.)

Drive Hydraulic - Charlynn 4000 series

Performance 2,780 Nm (2,050 ft/lbs.) @ 105 RPM)

Master bushing 47 cm (18 1/2 in.) square drive. Internal API opening 13 1/16 in. top of taper with 4 in. TPF

Mud plumbing

Size (hard plumbing) 3" XXH pipe (76mm)

Max Pressure 3000 psi (20.68mpa)

Connection to mud pump 3" (76mm) female 1502 hammer union for connection to customer supplied

mud system. Connection located off driller side,

Reel/top drive valves Qty 3 - Stemco 3" gate valves - one for manifold leading to topdrive kelly

one for manifold leading to coiled tubing reel - one for flow control between coiled tubing and topdrive kelly

Reel connection Reel plumbing - see Storage Reel above

Kill Line 2" (51mm) gate valve and fireproof hose for kill line

Instrumentation Qty 2 - 2" (51mm) NPT for connection to mud pressure transducer transducer not included

Top Drive Supplied by customer

Model FDS 100 ton

Hydraulic motor Hagglund CA 5050 radial piston motor

Hydraulic Pump Denison P24 218 GPM @ 2100 rpm, 5000 psi

Speed TBA

Torque TBA

Spindle TBA

Kelly hose 2 1/2" - 2400 psi (mast candy cane to topdrive)

A-frame hose 2 1/2" - 2400 psi (plumbing manifold to mast candy cane)

Whip checks Certified whip checks supplied at both ends

Mud swivel Supplied with topdrive

Guides Supplied with topdrive

Weight Weight not to exceed 6640 lbs

Drawworks Winch Supplied by customer

Make Rigmaster

Model E30 A/C

Capacity 200,000 lbs. with 6-line block (based on a bare drum)

Drum speed 1,200 fpm on a single line

Block speed 200 ft/min. (based on a full drum)

Drum width 34 in.

Dimensions 48 in. H X 64 in. W X 75 in. L

Brakes Dynamic on D/C bus - Parking - air actuated band brake

Drive group A/C motor

Load cell/WOB Load cell clamped to deadline

Auto driller Finite control to allow for auto drilling and coring functions

Power supply Supplied by customer

Controls Supplied by customer

Weight Weights not to exceed 10,000 lbs

Misc functions Location TBA

Slips in/out Manually/electrically operated hydraulic valve

Rotary table rotate Manually/electrically operated hydraulic valve
Winch utility Manually/electrically operated hydraulic valve
Breakout cly Manually/electrically operated hydraulic valve
Makeup cly Manually/electrically operated hydraulic valve

Setup functions Location TBA

Outrigger center LH Manually operated hydraulic valve
Outrigger center RH Manually operated hydraulic valve
Outrigger rear LH Manually operated hydraulic valve
Outrigger rear RH Manually operated hydraulic valve
Spooler Motor Manually/electrically operated hydraulic valve
Spooler Arm Manually/electrically operated hydraulic valve
Spare (doghouse lift) Manually operated hydraulic valve
Mast Raise Manually operated hydraulic valve

Outriggers Location TBA

Outrigger front LH Manually operated hydraulic valve
Outrigger front RH Manually operated hydraulic valve

BOP functions Location TBA

BOP raise RH Manually operated hydraulic valve
BOP raise LH Manually operated hydraulic valve

Stripper Location TBA

Pack/Retract Electrically controlled

Roughneck functions Valve supplied by customer - Location TBA

Roughneck tilt
Roughneck raise lower
Roughneck lower clamp
Roughneck lower rotate
Roughneck upper clamp
Roughneck upper rotate
Spinner clamp
Spinner rotate

Topdrive functions Valve supplied by customer - Location TBA

TD backup clamp open/closed
TD backup clamp up/dn
Elevators open/closed
Bales up/dn
Thread saver increase/decrease

Injector functions Valve supplied by customer - Location TBA

Lubricator winch
Gooseneck fold
Roller hold down
Injector tilt
Traction

Tension

Paint**Yellow - PPG - waiting on code**

Extreme yellow from Delfleet

Trailer including all decking - traction additive on all checker plate surfaces

Substructure

Substructure panels (exterior only)

Top drive

Injector

Rotary table

Drawworks

All hand rails and stairs

Mast rest

Outriggers

Level head, arms and raise/lower cylinders

Mud/steam/water plumbing

Slip and cut spool

White - PPG 20125 AUE 300

Mast (upper 8' yellow) traction paint on face of leg - doghouse side only

Candy canes

Engine hood

Hydraulic coolers

Fuel tank

Auxiliary winches

Control/junction boxes

Mast raise cylinders

Substructure panels (interior only)

Storage reel and drive plates

Fluids (non synthetic)

Engine Essolube XD3 Extra 15w40

Hydraulic System Esso Univis Extra

Pumpdrive Esso GX Extra 75W90

Winches Esso GX Extra 75W90

Grease points Esso Unirex EP2

12X CTR 2100 MODULES RELEASED TO PRODUCTION

12X-0020-020 TRAILER ASSEMBLY
12X-0400-420 SUBSTRUCTURE A-FRAME PLATFORM
12X-0500-010 ENGINE-POWER PACK
12X-0602-010 PUMP DRIVE & MOUNTING GROUP
12X-0916-010 LIGHTS & ACCESSORIES
12X-0928-800 DISCONNECT SWITCH - BATTERY
12X-1000-200 EXTERIOR HEATERS
12X-1060-010 COOLER ASSY-HYD CIRCUIT
12X-1190-001 DECALS
12X-1210-020 SCHEMATIC'S-HYD,ELEC & AIR
12X-1800-010 TANK ASSY - FUEL
12X-1850-060 TANK ASSY - HYDRAULIC
12X-1904-010 WINCH - DRAWWORKS
12X-1904-100 WINCH - GENERAL SERVICE
12X-1904-200 WINCH - LUBRICATOR
12X-1929-010 OUTRIGGER-REAR(SUB)W/MAECK LOC
12X-2160-020 PLUMBING -MUD SYSTEM
12X-2200-010 MAST ASSEMBLY
12X-2200-400 LUBRICATOR/STRIPPER ASSEMBLY
12X-2224-010 BREAKOUT & MAKE UP-W/HYD CYL
12X-2310-010 TOP DRIVE ASSY
12X-2360-010 INJECTOR ASSEMBLY
12X-2360-100 GOOSENECK ASSY-
12X-2400-010 DRILL CONTROLS-DOG HOUSE
12X-2400-200 DRILL CONTROLS-DRILL
12x-9000-001 TOOLING & SPARES
12X-9800-001 HOSE KIT
12X-9820-001 TESTING EQUIPMENT
12X-9850-001 FITTINGS
12X-9860-001 PAINT-CONSUMABLES
12X-9860-010 ELETRICAL-CONSUMABLES
12X-9870-001 FLUIDS AND TORQUE SPEC'S
12X-9880-001 WARRANTY,AFTER SALES RESERVE
44 ENGI.PROJECT DESIGN
46 WAREHOUSE-CAPITAL JOB PICKING
66 ENGINEERING CHANGE ORDERS
70 Q & A - INSPECTION
76 PROJECT SURPLUS INVENTORY

The following items have been issued through the BOM
but are required to be shipped loose with the unit.

Item	Part	Description	Qty
1.	Z91	Cable Weight	1
2.	Z91	Solenoid Valve	1
3.	344570	SPOOL-STORAGE WITH 1 IN. CABLE	1
4.	346771	CLAMP-MUD HOSE 3	1
5.	330181	COUNTERWEIGHT-SINGLE MAST	5
6.	19-80-293415	CHAIN 5/8" ALLOY GR80 X 8 FT LG	12
7.	337296	HOOK-SWIVEL 1/2	1
8.	19-80-289447	CHAIN 3/8"ALOY GR80X 8 FT LONG	1
9.	19-05-285960	ANCHOR SHACKLE - 1"	1
10.	19-80-293414	CONNECTOR LINK CHAIN 5/8 GR80	1
11.	322502	CABLE-9/16 C/W THIMBLE ONE END	1
12.	19-80-289448	CLEVIS-SLIP HOOK 3/8 ALLOY	1
14.	334858	HOSE-FIREPROOF 2 IN. KILL LINE	2
15.	353008	TURNBUCKLE-ROUGHNECK	1
16.	349034	CABLE-3/8 C/W THIMBLE ONE END	2
17.	355519	PIN-INJECTOR PIVOT	1
18.	350467	HOOK-TIE DOWN	2
19.	321570	Winch	1
20.	352121	CYL-INJECTOR LOCK PIN	1
21.	349651	ROPE-WIRE MAKE BREAK	2
22.	352214	INJECTOR-ASSY	1
23.	355701	GUARD-DRAWWORKS WINCH	1
24.	322503	CABLE-3/8 C/W THIMBLE ONE END	1
25.	352097	PIN-SUBSTRUCTURE PLATFORM MACH	1
26.	340253	SW Anti 2 Block	5
27.	336820	WEIGHT BLOCK	1
28.	19-31-288783	CLIP - 1" CABLE	10
29.	348255	CLAMP-WHIPCHECK 3 IN 2 PCS	2
30.	346368	SWIVEL JOINT-3 CUSTOM 6000	1
31.	340339	MT-BLAST JT ADAPTER MACH	1
32.	338458	MANIFOLD-TOP DRIVE CASE DRAIN	2
33.	349363	PIPE-LUBRICATOR WLDMT	1
34.	349380	STRIPPER-LUBRICATOR ASSY	1