

O-41 and G-70 Drilling and Completions Program
Anticipated Equipment Inventory

The following lists of equipment may be utilized on the various construction, drilling, testing and completions activity components for the 2013 O-41 and G-70 Vertical Wells Program.

Table 1: Anticipated Construction Equipment List

Item/Description	Quantity	Weight per item (Kg)
Light Vehicles		
Pickup Trucks – F350 or equivalent	6	3,200
Flat Deck Truck – F350	1	3,200
Mechanic's Truck – F450	2	4,200
Heavy Equipment		
Loader 980H	1	31,500
Loader 950B	1	18,500
John Deere 644	1	18,500
Grader 160H	1	15,700
Grader 14M	1	18,400
Dozer D8T	3	42,600
Dozer D6R	3	19,500
Excavator CAT 345	2	49,300
Excavator CAT 330C	1	35,100
Rock Drill Terex SD 345	1	17,900
Self-propelled Packers	2	17500
Heavy Trucks/Trailers		
Rock Truck CAT 730	10	24,500
Tri-Axle Cross Clam Belly Dump	5	11,500
Fuel and Lubricant Truck	1	11,400
Roll Off Truck w/ Sewage and Water Tanks and 2 Garbage Bins	1	16,300
Winch Truck Tridem	1	15,000
Scissor Deck Tridem	1	15,000
Truck Shop	1	23,500
Crew truck with tanks	6	3,400
ATV's	4	400
61,000 Litre Enviro Tank c/w containment	4	13,000
Light Tower	12	1,200
Rig Mats	8	2,000
7 unit side by side c/w 24 bottom beds, Kitchen washrooms, rec room	1	67,000
8 man single sleepers	2	8,000
60 man washcar	1	12,000
10 man sleeper	1	8,000
Corridor	1	4,000

Item/Description	Quantity	Weight per item (Kg)
Heated water storage tank	1	3,400
Generator (1) Back Up Generator	1	8,000
Incinerator and ash bin	1	7,000
12 x 60 Office trailer with communications	2	23,000
Sewage Treatment Plant	1	9,000
Water Treatment Plant	1	9,000
Skid Mounted Generator	1	10,000
Steps – (building)	4	5
Seacans	4	4,500
Tool Van	1	8,000

Table 2: Anticipated Drilling Equipment (Akita Rig 37)

Item/Description	Quantity	Weight per item (Kg)
Substructure	1	31,250
Derrick & Drawworks	1	44,642
Doghouse / Fuel tankd / water tank	1	29,300
Mud Pumps	2	48,500
Mud Tanks	2	25,900
Top Drive and Power unit	2	20,000
BOP	1	22,100
Manifold Shack / Catwalk	1	25,200
Generator / Accumulator Building	1	37,700
Pipe Racks	2	15,000
Boiler	2	14,000
Rig Mats	14	4,875
Rig Manager's Trailer	1	15,000
Pipe tubs	8	21,600
Pony sub	1	20,000
Catwalk & Manifold Shack	1	17,100
Drill Collar/Pipe rack	1	35,100
Drilling String	1	50,000
Storage Seacan & miscellaneous loads	1	20,000

Table 3: Anticipated Supplementary Equipment List for Wells G-70 and O-41 and 1 Rig (Akita 37)

Item/Description	Quantity	Weight per item (Kg)
Casing, Truck loads of tubulars	12	30,000
Cementing, Truck loads bulk cement & pumping equipment	10	20,000
Drilling Fluid, solids, truck loads	6	20,000
Drilling Fluid, liquids, truck loads	12	22,000
400 BBL Tanks	2	12,000
Fishing / BHA, truck load	1	10,000
Directional and Bits, truck load	1	25,000
Wellsite Shacks	7	22,000
Boiler for waste management operations	1	5,000
Fuel Tank Berm	2	5,000
Oil based mud tank farm, 400bbl tanks set for locations	12	17,000
Water Tank, 400 bbl tank	2	15,000
Logging tools, truck load	1	30,000
Centrifuges, big bowl	2	8000
Storage Tanks (floc tanks)	6	7,500
Bit & Coring Equipment, truck load	1	15,000
Casing Running Equipment, Truck load	1	15,000
Safety equipment, Truck loads	1	8,000
Miscellaneous rentals, Truck loads	8	5,000
Fuel Trucks, 100 bbl fuel tank	1	4,000
Water Truck (camp and drilling), 100 bbl water trucks (West side of the Mackenzie River)	2	16,000
Vacuum Truck, 80 bbl vac truck	2	25,000
Miscellaneous equipment, Truck loads	50	15,000

Table 4: Anticipated Completions Equipment

Description	Quantity	Weight per item (Kg)
Service Rig Equipment		
Rig Carrier and Engine	1	43,000
Derrick	1	
Drawworks and Blocks	1	
Catwalk	1	
Pipe Racks	3	1,500
Fluid Pump and Engine	1	54,000
Rig Tank		
Accumulator for BOP	1	25,800
Class III BOP stack		
Fuel tank		
Air Compressor	1	27,600
Dog House		
Generator		
Boiler	1	17,000
Boiler (Swab)	1	15,000
Swabbing Rig		
Rig Carrier and Derrick	1	23,500
Fracturing and Acidizing Equipment		
Coiled tubing unit	1	41,500
Data Van	1	36,500
Blender	2	46,500
Chemical Van	2	46,500
Frac Pumpers	8	46,500
Manifold Trailer	1	40,000
Iron Truck	1	45,200
End Dump Sand Trailer	1	45,200
Air Slide Sand Trailers	3	45,000
Picker	1	40,000
N2 Transport	4	46,500
N2 Pumping Unit	3	45,000
C&A Fluid Pump	1	35,000
Parts Refer	1	42,000
Mechanics Refer	1	42,000
Mechanics Crew Cab	2	4,500
Pick up	5	5,500
Parts Seacan	1	14,000
Acid Hauler	1	14,000
Slick Line Truck		
Slick line truck	1	17,600
Picker	1	13,300
Pickup	1	5,500

Description	Quantity	Weight per item (Kg)
Hot Oilers	1	28,000
Fluid Storage and Fluids		
400 bbl tanks	30	4,990
Secondary Containment for Tank Farms	2	2,000
KCL Dry Powder	146 Sacs	3,650
HCl Acid @ 1170 kg/m ³	10	11,700
Methanol @ 791.81 kg/m ³	80	39,590
N ₂	98,000 SCM	
Sand	120 Tonne	120,000
Well Test Equipment		
High Stage Separator	2	27,300
Test Manifold	2	300
Propane Vaporizer	2	18,200
Tool Crib/Pipe Rack	2	18,000
Incinerator	2	16,500
Generator (for Incinerator)	2	1,000
Surface Equipment		
Well site Trailers	12	20,000
Generators (125 KWV)	4	8,000
Generators (100 KWV)	2	7,500
Light Towers	12	1,000
Rental Pickups	12	4,000
Conley Max Heater	1	4,000
Wellhead Equipment		
Frac Head	1	1,000
Production Head	2	1,000
Misc. Equipment	1	1,000
Down Hole Equipment		
Packers	3	2,000
On/Off Tools	3	
Nipples	10	
Bridge Plugs	3	
Casing Scrapers	1	
Frac /Prod string 88.9	2,450 m	64,500
Pup Joints 88.9	20	
Wireline Equipment		
E-Line Truck	1	54,000
550 Pickup	1	18,000
Perforating Guns	2/4- 6/2m	2,000
Bond Logging Tools	2	
Sand Bailers	1	
Temp Log Tools	2	

Description	Quantity	Weight per item (Kg)
10 K Grease (pump/lub)	1	16,000
Misc. Box	1	2,000
Combo Fire/Shower	2	20,000
Combo Vacuum Truck	1	20,000
Fuel Trucks	1	14,000
Water Trucks	1	12,000
Picker Trucks	1	22,000
Propane tanks	4	4,500

The following items may be included as additional equipment on this program:

- Helicopter
- Fixed-wing aircraft
- Chainsaws
- Power augers