




Company Brochure  
2012

# Company Overview




DHS Drilling Company (DHS) was founded in April 2005 with the purpose of providing superior, cost effective, safe, efficient contract drilling operations. Primarily focusing in the Rocky Mountain region generally characterized by unconventional natural gas formations with very low permeability rock, such as tight sands and shale as well as horizontal drilling for liquids. In addition, DHS has drilled multiple geothermal wells in Nevada.

Headquartered in Casper, Wyoming, DHS is lead by industry veterans, Bill Sauer, Jr. and Harold Hastings who possess a rich history and vast knowledge of the contract drilling business with over 80 years of combined experience. Coupled with quality superintendents, rig managers and rig crews, DHS has the experience, knowledge, technical support and safety record to bring your well in on time and on budget.

The company currently owns 17 onshore drilling rigs with 14 core rigs drilling in the Rocky Mountain region. Capabilities of the rig fleet range from 700 hp rigs that can drill to 10,000' to 2,000 hp rigs with depth capacity of 25,000'.

DHS is a privately owned, independent contract drilling company not affiliated with any exploration and production companies.

# DHS Management



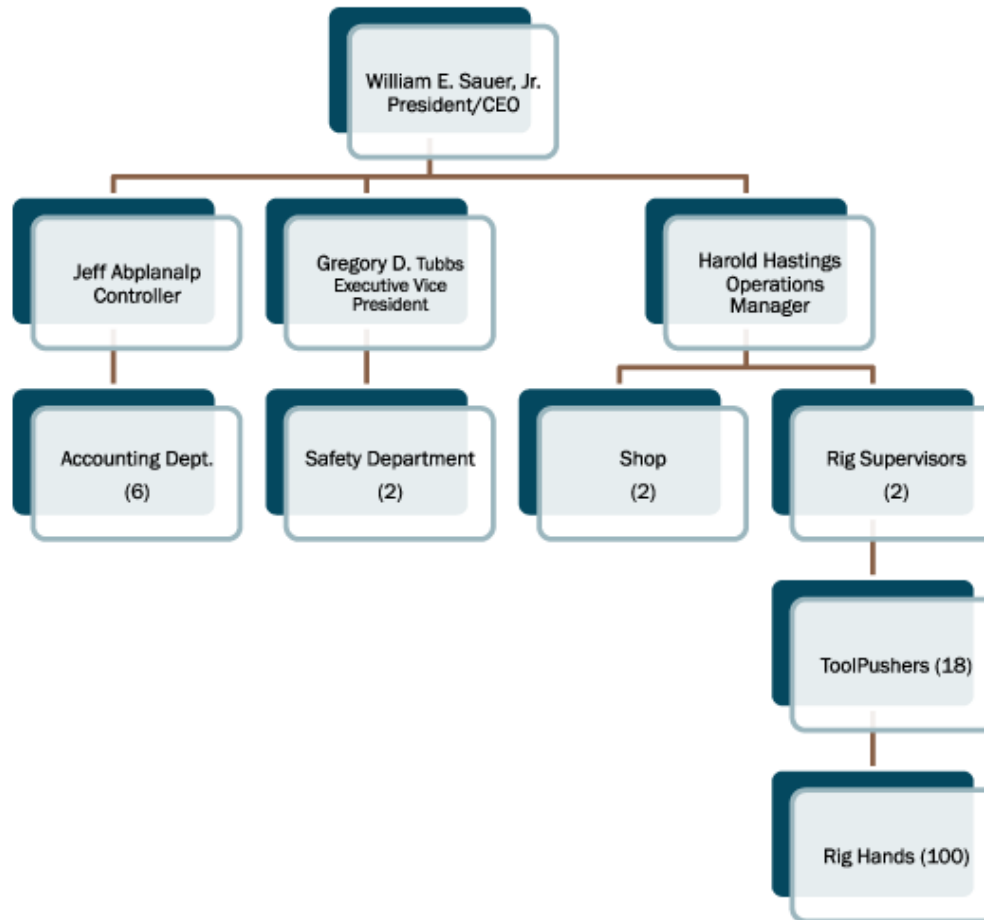
**William E. Sauer Jr.**  
President/ CEO/ Director  
307-232-3401  
bsauer@dhsdrilling.com

**Gregory D. Tubbs**  
Executive Vice President  
303-575-0303  
gtubbs@dhsdrilling.com

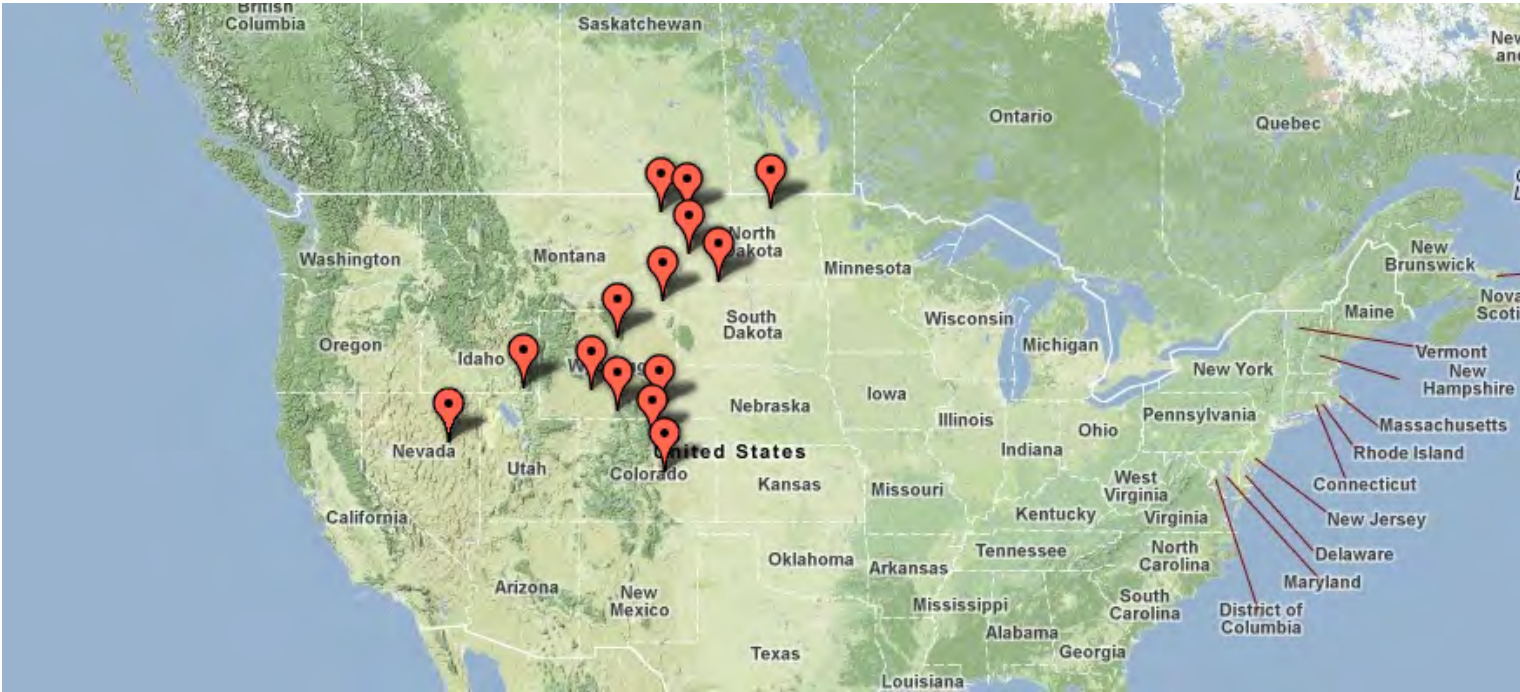
**Harold Hastings**  
Operations Manager  
307-232-3402  
hhastings@dhsdrilling.com

**Jeffrey Abplanalp**  
Controller  
307-232-3403  
jabplanalp@dhsdrilling.com


# Organizational Chart



# Rig Fleet Locations



# Rig Description



	<b>Description</b>	<b>Vertical Depth</b>	<b>Power</b>
Rig 1	Gardner Denver 1100	20,000' (5" DP)	1500hp
Rig 4	National 45 (Diesel Electric)	11,000'	700hp
Rig 5	OIME 750 (Diesel Electric)	12,000' (5" DP)	700hp
Rig 6	Superior 700 (Diesel Electric)	12,000'	700hp
Rig 8	Gardner Denver 700	14,000'	800hp
Rig 9	Gardner Denver 800	15,000'	1000hp
Rig 10	Gardner Denver 800	15,000'	1000hp
Rig 11	OIME 500 (Diesel Electric)	11,000' (5" DP)	750hp
Rig 12	Gardner Denver 800	15,000'	1000hp
Rig 14	Gardner Denver 700	14,000' (5" DP)	800hp
Rig 17	National 55	14,000'	1000hp
Rig 18	Mid Continent 36 AE (Diesel Electric)	11,000'	700hp
Rig 19	Oilwell 76	12,000'	700hp
Rig 20	National 55	12,500'	1000hp



# Rig 1 Inventory

## Rig 1 - 20,000' Capacity with 5" Drill Pipe

- Draw-works** Gardner-Denver 1100 with 481 Parmac hydromatic brake powered by (3) - CAT D-3508 engines with National C-300-64 torque converters – 1500hp
- Substructure & Mast** Pyramid 147 mast, 980,000 GNC. 1 3/8" line, Pyramid 24'x 60 step down substructure
- Generators** (2) - 455 KW AC generators powered by (2) CAT C-15 (turbo charged diesel engines)
- Mud Pumps** (1) Chinese 1600hp triplex mud pumps driven by a 3512 CAT engine (Baoji), (1) Gardner Denver PZ11 triplex pump driven by 3512 CAT engine
- Rotating & Traveling Equipment** Oilwell rotary table - 37.5", B-YC450Z blocks - 500 ton with BJ 5500 hook, National P-500 swivel, 5 1/4"x 46' kelly, Varco HD pin drive bushings
- Blowout Prevention** 11" Annular BOP - 10,000 psi, 11" Cameron type U double gate ram BOP - 10,000 psi, 11" Cameron type U single gate ram BOP - 10,000 psi, Koomey Model 160-gallon automatic accumulator, 6-station air actuated remote control panel 4" & 3" 10,000 psi, complete manifold with gauges and manual chokes
- Doghouse, Water, Fuel & Mud Tanks** Heated doghouse (1) - fuel tank – 12,000 gal, (1) - water tank – 500bbl, (3) 10' x 8' x 52' mud tanks complete with (5) – 5" x 6" electrical driven centrifugal pumps manifolded to low pressure system with electrically driven mud agitators, mud guns – 1400bbl capacity, (2) - Swaco linear mongoose shakers, Mission desander 2 -10" cones, Mission desilter 12 - 4" cones
- Handling Tools/Auxiliary Equipment** BJ type SDD tongs, Pilot 2 automatic driller sure shot, 14° A-1 survey instrument, M.D.Totco type 100 weight indicator
- Drill Pipe & Drill Collars** 20,000' 5" OD 19.50# drill pipe E, G & S, (21) 6 1/4" x 2 1/4" x 30' slick drill collars, (2) 8" x 30' drill collars, (3) 9' drill collars



# Rig 4 Inventory

## Rig 4 - 11,000' Capacity with 4 1/2" Drill Pipe

**Draw-works** National T45 electric driven by 752 traction motor, 750 HP with Eaton disc brake.

**Substructure & Mast** Dreco 131' mast, 385,000# hook load, 1 1/8" drilling line, LCM 18'x28'x41' substructure setback capacity 400,000#

**Generators** 4 bay IPS system, SCR (new), (3) CAT C-32 generators 725 KW

**Mud Pumps** (2) MD-PZ-9 triplex driven by (2) 752 traction motor

**Rotating & Traveling Equipment** Gardner Denver rotary table, 20.5" Bass Ross traveling blocks, 300 ton Emsco swivel, LB 200 BJ type B tongs

**Blowout Prevention** 11" annular BOP - 3,000 psi, 11" Shaffer LWS double gate ram BOP - 3,000 psi, 180-gallon automatic accumulator, 4-station air actuated remote control panel 3" x 5,000 psi, choke manifold with gauges and manual chokes

**Doghouse, Water, Fuel & Mud tanks** Heated doghouse, (1) fuel tank - 8,000 gal, (1) water tank - 400 bbl, (2) tank mud system 850 bbls with (4) 5x6x11 centrifugal pumps on low pressure system, (3) mud agitators, (2) Swaco ALS linear shakers, (1) National 2 cone desander, (1) National 10 cone desilter

**Handling Tools/Auxiliary Equipment** (2) hydraulic catheads, (2) hydraulic winches, Pilot II automatic driller, (1) Sure Shot 7 degree A-1 survey instrument, (1) set hydraulic kelly spinners, (1) set hydraulic pipe spinners

**Drill Pipe & Drill Collars** 11,000' - 4 1/2" 16.60# mixed grade drill pipe, (21) 6.25" x 2.25" x 30' slick drill collars, (2) 8" x 30' slick drill collars



# Rig 5 Inventory

## Rig 5 - 12,000' Capacity with 5" Drill Pipe

<b><u>Draw-works</u></b>	Oime SL750 electric driven by 752 traction motor, 750 HP with Parmac 341 brake 700 HP
<b><u>Substructure &amp; Mast</u></b>	Parco 131' mast, 550,000# HL, 1 1/8" line, Parco substructure 18'H x 25'W x 35'L. Substructure self elevating with optional 6' pony subs.
<b><u>Generators</u></b>	SCR System IDM 4 bay, (3) - CAT C32 generator set 810 KW
<b><u>Mud Pumps</u></b>	(2) Gardner Denver PZ 9 driven by (2) 752 traction motor triplex
<b><u>Rotating &amp; Traveling Equipment</u></b>	Gardner Denver rotary table - 27.5", Gardner Denver traveling blocks - 300 Ton, BJ hook - 250 ton, National swivel - N69 iron roughneck twister torque access tool
<b><u>Blowout Prevention</u></b>	13 5/8" annular BOP - 3,000 psi, 13 5/8" Shaffer LWS ram BOP - 3,000 psi, Model 180-gallon automatic accumulator, 4-station air actuated remote control panel 3" x 5,000 psi, complete manifold with gauges and chokes
<b><u>Doghouse, Water, Fuel &amp; Mud Tanks</u></b>	Heated doghouse, fuel tank - 19,000 gal, (1) water tank - 400 bbl, (2) tank mud system 850 bbls with (4) 5 x 6 pumps with low pressure system, (3) agitators, (2) Swaco mongoose linear shakers, National (2) cone desander, National (10) cone desilter
<b><u>Handling Tools/Auxiliary equipment</u></b>	Pilot II automatic driller, Sure Shot 7 <sup>o</sup> A-1 survey instrument, Martin-Decker type D weight indicator
<b><u>Drill Pipe &amp; Drill Collars</u></b>	12,000' - 5" 19.50# mixed grade drill pipe, (12) 6 1/4" x 2 1/4" x 30' slick drill collars, (10) 8" drill collars



# Rig 6 Inventory

## Rig 6 - 12,000' Capacity with 4 1/2" Drill Pipe

- Draw-works** Superior 700 UE 750 hp electric, with a V80 Parmac hydromatic, powered by (1) 752 traction motor, 1 1/8" drilling line.
- Substructure & Mast** Oilfield Welding LTD 131' mast, 366,000# hook load, Oilfield Welding LTD 16' substructure, setback capacity 400,000#
- Generators** (3) CAT D-3412 generators sets - 600 kw (4) bay SCR Baylor system with General Electric MCC.
- Mud Pumps** (2) F-800 Emsco triplex driven By (2) 752 traction motors
- Rotating & Traveling Equipment** Dreco 275 rotary table - 27.5", National blocks - 250 ton w/ BJ 540-G hook, 250 ton Oilwell swivel - 300 Ton, 5 1/4" hex x 42' long kelly, BJ type DB tongs
- Blowout Prevention** 11" 5K Townsend annular BOP, 11" 5K Townsend double G ram BOP w/3 1/2" X 5" variable pipe rams psi, model 80-gallon automatic accumulator, 6-station air actuated remote control panel, 4"X2" 10K choke manifold with HCR valve and (2) manual chokes
- Doghouse, Water, Fuel & Mud Tanks** Heated doghouse, (1) fuel tank - 12,000 gal, (1) water tank - 400 bbl, (2) tank mud system - 650bbls with (4) 5x6x11 centrifugal pumps on low pressure system, (5) mud agitators, (2) Swaco mongoose linear shakers, (1)National 2 cone desander, (1) National 10 cone desilter
- Handling Tools/Auxiliary Equipment** (2) hydraulic winches, (1) Pilot II automatic driller, (1) Sure Shot 7 degree A-1 survey instrument, Martin Decker type D weight indicator
- Drill Pipe & Drill Collars** 12,000' - 4 1/2" 16.60# grade G drill pipe, (17) 6.25"x2.25"x30' slick drill collars (1) 8"x30' slick drill collar



# Rig 8 Inventory

## Rig 8 - 14,000' Capacity with 4 1/2" Drill Pipe

**Draw-works** Gardner-Denver 700 with 342 Parmac hydromatic brake powered by (2) - CAT C-15 engines with (2) National 195-80 torque converters - 800 hp

**Substructure & Mast** Pyramid 131' mast, 550,000# GNC, 1 1/4" line, Pyramid 17' H substructure

**Generators** (2)- 320 KW AC generators powered by (2) CAT C-15 diesel engines

**Mud Pumps** (2) Gardner Denver PZ-9 driven by (2) 3508 CAT diesel motors.

**Rotating & Traveling Equipment** Chinese Rotary Table - 27 1/2", Emsco block and BJ hook - 250 ton, Ideco swivel - 300-ton, 5 1/4" x 42' kelly, Varco HD pin drive bushings

**Blowout Prevention** 13 5/8" annular BOP - 5000 psi, 13 5/8" double gate ram BOP - 5000 psi, 4" x 3" - 5000 psi, complete manifold with gauges and chokes

**Doghouse, Water, Fuel & Mud Tanks** Heated doghouse, (1) fuel tank - 12,000 gal, (1) water tank - 500 bbl, (2) 10' x 5' x 40' mud tanks complete with (4) 5" x 6" electrical driven centrifugal pumps manifold to low pressure mud system with electrically driven mud agitators, mud guns - 650 bbl capacity, (2) Fluid System linear shale shakers, (1) Fluid System desander 10" cones, (1) Fluid System desilter 10 - 4" cones

**Handling Tools/Auxiliary Equipment** BJ 48" type B tongs, Pilot II automatic driller, Sure Shot 14<sup>o</sup> A-1 survey instrument, M.D.Totco type D weight indicator

**Drill Pipe & Drill Collars** 14,000' - 4 1/2" 16.60# drill pipe, (21) 6 1/4" x 2 1/4" x 30' slick drill collars, (2) 8" x 30' drill collars



# Rig 9 Inventory

## Rig 9 - 15,000' Capacity with 4 1/2" Drill Pipe

- Draw-works** Gardner-Denver 800 with a 342 Parmac hydromatic, 1 1/4" drilling line powered by (2) C-15 CAT diesel engines with (2) National 195-80 torque converter
- Substructure & Mast** DSI 142' mast, 1,000,000# hook load on 12 lines, Pyramid 25' substructure, setback capacity 455,000#
- Generators** (2) 455kw AC generators powered by (2) CAT 3456 diesel engines, (1) MCC capable of 480v, 220v or 120v electricity
- Mud Pumps** (1) FB-1300 Bomsco driven by (1) 3512 CAT diesel engine, (1) FB-1300 Emsco, driven by (1) 399 CAT diesel engine
- Rotating & Traveling Equipment** National rotary table - 27 1/2", Gardner Denver blocks - 525 ton, Ideco swivel - 400 ton, 5 1/4" Hex x 42' long kelly, BJ type DB tongs
- Blowout Prevention** 11" annular BOP - 10,000 psi, 11" double gate ram BOP - 10,000 psi, 11" single gate ram BOP - 10,000 psi, model 120-gallon automatic accumulator, 5-station air actuated remote control panel, 4"x3"x 10,000 psi, choke manifold with gauges and (2) manual chokes
- Doghouse, Water, Fuel & Mud Tanks** Heated doghouse, (1) fuel tank - 18,000 gal, (1) water tank - 400 bbl, (2) tank mud system 850 bbls with (4) 5"x6"x11" centrifugal pumps on low pressure system, mud agitators, mud guns, (2) fluid system shakers, (1) fluid system desander, (1) fluid system desilter
- Handling Tools/Auxiliary Equipment** (2) air winches, (1) Pilot II automatic driller, (1) Sure Shot 7 degree A-1 survey instrument, Martin Decker type D weight indicator
- Drill Pipe & Drill Collars** 15,000' - 4 1/2" 16.60# Grade G Drill Pipe, (14) 6.25" x 2.25" x 30' slick drill collars, (45) joints HWDP



# Rig 10 Inventory

## Rig 10 - 15,000' Capacity with 4 1/2" Drill Pipe

- Draw-works** Gardner-Denver 800 with a 342 Parmac hydromatic, 1 1/4" drilling line, powered by (2) C-15 CAT diesel engines with (2) National 195-80 torque converter.
- Substructure & Mast** DSI 142' mast, 796,000# hook load on 12 lines, Pyramid 25' substructure, setback capacity 750,000# with a 6' pony sub
- Generators** (2) 455kw AC generators powered by (2) CAT 3456 diesel engines, (1) MCC Capable of 480v, 220v or 120v electricity
- Mud Pumps** (2) FB-1300 HP triplex driven by (2) 399 CAT diesel engines
- Rotating & Traveling Equipment** National rotary table - 27 1/2", Ideco Big Shorty - 400 Ton, Ideco 815 swivel - 500 Ton, 5 1/4" hex x 44' long kelly, BJ type DB tongs
- Blowout Prevention** 13 5/8" annular BOP - 5000 psi, 13 5/8" double gate ram BOP - 5,000 psi, Model 120-gallon automatic accumulator, 5-station air actuated remote control panel, 4" x 3" x 5,000 psi, choke manifold with gauges and (1) manual choke
- Doghouse, Water, Fuel & Mud Tanks** Heated doghouse, (1) fuel tank - 18,000 gal, (1) water tank - 400 bbl, (2) tank mud system 850 bbl with (4) 5"x6"x11" centrifugal pumps on low pressure system, mud agitators, mud guns, (2) Fluid System shakers (1) Fluid System desander (1) Fluid System desilter
- Handling Tools/Auxiliary Equipment** (2) air winches, (1) Pilot II automatic driller, (1) Sure Shot 7 degree A-1 survey instrument, Martin Decker type D weight indicator, (1) heated safety shack
- Drill Pipe & Drill Collars** 15,000' - 4 1/2" 16.60# Grade G Drill Pipe, (14) 6.25" x 2.25" x 30' slick drill collars



# Rig 11 Inventory

## Rig 11 - 11,000' Capacity with 5" Drill Pipe

**Draw-works** Oime HH500 electric driven by 752 traction motor, 750 HP with Parmac 341 brake.

**Substructure & Mast** Parco 131' mast, 360,000# hook load, 1 1/8" line, Parco 22' x 25' x 35' substructure self elevating

**Generators** SCR system IDM 4 bay (3)- CAT D-3508 generator set 800 KW

**Mud Pumps** (1) American PZ-9 driven by (1) 752 traction motor triplex, (1) Gardner Denver PZ-9 driven by (1) 752 traction motor triplex

**Rotating & Traveling Equipment** Chinese rotary table - 27 1/2", Emsco traveling blocks - 300 ton, Web Wilson hook - 250 Ton, Emsco swivel LB-200, BJ type B tongs

**Blowout Prevention** 13" annular BOP - 5000 psi, 13" double gate ram BOP - 5000 psi, Model 180-gallon automatic accumulator; 4-station air actuated remote control panel, 3" 5,000 psi complete manifold with gauges and chokes

**Doghouse, Water, Fuel & Mud Tanks** Heated doghouse, (1) fuel tank gal (1), water tank - 400 bbl, (2) tank mud system 850 bbl with (4) 5"x 6" pumps with low pressure system, (3) agitators, (2) Swaco linear mongoose shakers, National (2) cone desander, National (12) cone desilter.

**Handling Tools/Auxiliary Equipment** Pilot II automatic driller, Sure Shot 7° A-1 survey instrument, Martin-Decker type D weight indicator

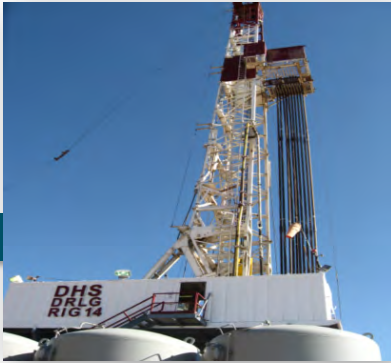
**Drill Pipe & Drill Collars** 11,000' - 5" 19.50# mixed grade drill pipe, (8) 6 1/4" x 2 1/4" x 30' slick drill collars (6) 8" drill collars



# Rig 12 Inventory

## Rig 12 - 15,000' Capacity with 4 1/2" Drill Pipe

- Draw-works** Gardner-Denver 800 with 342 Parmac hydromatic brake powered by (2) - CAT C-15 engines with National 195-80 torque converters – 1000 hp
- Substructure & Mast** Brewster 136' mast, 650,000 GNC, 1 1/4" line, 27' H substructure
- Generators** (1)- 455 KW powered by (1) CAT 3406B diesel engine (1)- 425 KW AC generator powered by (1) CAT 3406 diesel engine
- Mud Pumps** (2) Gardner Denver PZ-11 driven by (2) 3512 CAT engines, belt driven
- Rotating & Traveling Equipment** Gardner Denver 27 1/2" rotary table, Ideco 350 ton block, BJ hook, SL type 400-ton swivel, 5 1/4" x 42' kelly, Varco HD pin drive bushings
- Blowout Prevention** 11" 5,000 lb. annular BOP, 11" 10,000 lb. double gate BOP, Koomey Model 120-gallon automatic accumulator, 5-station air actuated remote control panel, 4" & 3" 3,000 lb. complete manifold with gauges and chokes
- Doghouse, Water & Mud Tanks** Heated doghouse, (2) 10' x 6' x 40' mud tanks complete with (4) - 5" x 6" electrical driven centrifugal pumps manifolded to low pressure system with electrically driven mud agitators, mud guns – 850 bbl capacity, (1) water tank – 500-bbbls, (1) 20,000 gallon fuel tank, (2) Swaco linear shale shakers, 12,000 gallon fuel tank Fluid System, desander (2) – 10" cones, Fluid System desilter (10) - 4" cones
- Handling Tools/Auxiliary Equipment** HT55 Foley tongs, Pilot II automatic driller, Sure Shot 14<sup>o</sup> A-1 survey instrument, M.D.Totco type D weight indicator
- Drill Pipe & Drill Collars** 15,000' 4 1/2" OD 16.60# drill pipe, (21) 6 1/4" x 2 1/4" x 30' slick drill collars, (2) 8" x 30' drill collars



# Rig 14 Inventory

## Rig 14 - 14,000' Capacity with 5" Drill Pipe

- Draw-works** Gardner-Denver 700 with 481 Parmac hydromatic brake powered by (2) - CAT C-15 engines with National 195-80 torque converters – 800 hp
- Substructure & Mast** Pyramid 131' mast, 550,000# GNC, 1 ¼" line, Pyramid 25' H substructure
- Generators** (2)- 425 KW AC generators powered by (2) Detroit Series 60 diesel engines
- Mud Pumps** (2) 1000 HP Weatherford triplex powered by 3508 CAT engines.
- Rotating & Traveling Equipment** National 27 ½" rotary table, Ideco 500 ton block BJ hook, Gardner Denver SW300-ton swivel, 5¼" x 42' kelly, Varco HD pin drive bushings
- Blowout Prevention** 13 5/8" 5,000 lb. annular BOP, 13 5/8" 5,000 lb. double gate BOP, Koomey Model 80-gallon automatic accumulator, 5-station air actuated remote control panel, 4" & 3" 5,000 lb. complete manifold with gauges and chokes
- Doghouse, Water & Mud Tanks** Heated doghouse, (2) 10' x 6' x 40' mud tanks complete with (4) - 5" x 6" electrical driven centrifugal pumps manifolded to low pressure system with electrically driven mud agitators, mud guns – 650 bbl capacity, (1) water tank – 500 bbl, 12,000 gallon fuel tank
- Handling Tools/ Auxiliary Equipment** BJ 48" type B tongs, Pilot II automatic driller, Sure Shot 14° A-1 survey instrument, M.D.Totco type D weight indicator
- Drill Pipe & Drill Collars** 14,000' 4 1/2" OD 16.60# drill pipe, (18) 6¼" x 2¼" x 30' slick drill collars, (2) 8" x 30' drill collars



# Rig 17 Inventory

## Rig 17 - 14,000' Capacity with 4.5" Drill Pipe

- Draw-works** National 55 with 46" Parmac hydromatic brake powered by (2) - CAT C-18 engines with National C-195-100 torque converters – 1000 hp
- Substructure & Mast** LCM 142' mast, 750,000 GN, 1 ¼" line, LCM 16' x 48' substructure
- Generators** (1)- 455 KW AC generator powered by (1) CAT 3456 diesel engine (1) 365 KW AC generator powered by (1) CAT C-15
- Mud Pumps** (2) PZ-9 triplex powered by (2) 3508 CAT Engines.
- Rotating & Traveling Equipment** National RC 27 ½" rotary table, Emsco 500 ton block & BJ hook, National PC-300 ton swivel, 5¼" x 42' kelly, Varco HD pin drive bushings
- Blowout Prevention** 13" 5,000 lb. annular BOP, 13" 5,000 lb. double gate BOP type E type 70 rubbers, 88-gallon automatic accumulator, 5-station air actuated remote control panel, 4" X 3" 5,000 lb. complete manifold with gauges and manual chokes
- Doghouse, Water & Mud Tanks** Heated doghouse, (2) 9'11" x 5'6"x 43' mud tanks complete with (4) - 5" x 6" electrical driven centrifugal pumps manifolded to low pressure system with electrically driven mud agitators, mud guns – 740 bbl capacity, (1) water tank – 500-Bbls, (1) 10,000 gallon fuel tank, (2) – Swaco linear shale shakers, National desander (2) – 10" cones, National desilter (10) - 4" cones
- Handling Tools/Auxiliary Equipment** BJ 48" type DB tongs, Pilot II automatic driller, Sure Shot 7º A-1 survey instrument, M.D. type D weight indicator
- Drill Pipe & Drill Collars** 14,000' 4.5" OD 16.60# drill pipe G, (21) 6¼" x 2¼" x 30' slick drill collars, (2) 8" x 30' drill collars



# Rig 18 Inventory

## Rig 18 - 11,000' Capacity with 4.5" Drill Pipe

<b><u>Draw-works</u></b>	U-36 AE 700 HP electric driven by (1) 752 traction motor with V80 Parmac hydromatic - 700 HP
<b><u>Substructure &amp; Mast</u></b>	Branham 131' mast, 385,000 HL. 1 1/8" line, Pyramid box on box substructure 16' H
<b><u>Generators</u></b>	SCR System IPS (3) bay with Allen Bradley MCC, (3) CAT D-3412 generator set 725 KW.
<b><u>Mud Pumps</u></b>	(2) National 8P-80 triplex driven by (2) 752 traction motors
<b><u>Rotating &amp; Traveling Equipment</u></b>	National C- 27.5" rotary table, Emsco 250 ton, Web Wilson 250, National P-300 swivel, 5 1/4 " x 40' hex kelly, Varco drive bushings
<b><u>Blowout Prevention</u></b>	13 5/8" 5,000 lb. annular BOP, 13 5/8" 5,000 lb. hydrill double gate, koomey Model 120-gallon automatic accumulator, 6-station air actuated remote control panel, 3" 5,000 lb. complete manifold with gauges and chokes
<b><u>Doghouse, Water &amp; Mud Tanks</u></b>	Heated doghouse, water tank 540 bbl, (2) tank mud system 750 bbl with (3) 5" x 6" pumps with low pressure system, (3) agitators, (2) Swaco ALS linear shakers, National (2) cone desander, National (10) cone desilter.
<b><u>Handling Tools/Auxiliary Equipment</u></b>	5 1/4" kelly drive, 42' Pilot II automatic driller, Sure Shot 7 <sup>o</sup> A-1 survey instrument, Martin-Decker type D weight indicator
<b><u>Drill Pipe &amp; Drill Collars</u></b>	11,000' 4 1/2" 16.60# grade G drill pipe, (21) 6 1/4" x 2 1/4" x 30' slick drill collars, (2) 8" drill collars



# Rig 19 Inventory

## Rig 19 - 12,000' Capacity with 4 1/2" Drill Pipe

- Draw-works** Oilwell 76 single drum 1000 HP driven by (2) CAT C-18 engines with 46" hydromatic
- Substructure & Mast** Lee C Moore 136' Cantilever mast, 488,000# HL, 1 1/4" line with Crown-O-Matic, enclosed box substructure 15' 5" H, 600,000# HL
- Generators** (2) 365 KW generator sets powered by CAT D3406, (1) Gardner Denver 1260 CFM screw type air compressor powered by 30 HP electric motor
- Mud Pumps** (2) 3NB1000C Chinese triples mud pumps driven by (2) 3508 CAT diesel motors
- Rotating & Traveling Equipment** 27 1/2" X 54" rotary table, Emsco 250 ton block and hook, National PC-225, 300 ton swivel, 5 1/4" x 42' kelly, Varco HD pin drive bushings
- Blowout Prevention** Shaffer Spherical, Townsend 5000# double gate, Burnsco 88-gallon automatic accumulator, 5-station air actuated remote control panel, 2" X 3" 5000# complete manifold with gauges and chokes
- Doghouse, Water & Mud Tanks** Heated top doghouse fuel tank – 10,000 gal, water tank - 513 bbl, (2) tank mud system 600 bbl with (4) 5" x 6" centrifugal pumps with low pressure system with (4) agitators in each, (1) 50 bbl pill tank, (2) Swaco ALS linear shakers, National (2) cone desander, National (10) cone desilter
- Handling Tools/Auxiliary Equipment** 5 1/2" hex kelly, 46' Pilot II Automatic driller, Sure Shot 7<sup>th</sup> A-1 survey instrument, Martin-Decker type E weight indicator
- Drill Pipe & Drill Collars** 10,000' 4 1/2" 16.60# grade G drill pipe, 4 1/2" XH, (12) 6 1/2" x 2 1/4" x 30' slick drill collars, 4 1/2" XH, (2) 8" drill collars

# Rig 20 Inventory



## Rig 20 - 12,500' Capacity with 4 1/2" Drill Pipe

- Draw-works** National 55 double drum 1000 HP driven by (2) CAT C-15 engines (540 HP each) with C 195 Oilworks torque converters - 700 HP.
- Substructure & Mast** Lee C Moore 133' Cantilever mast, 466,000# HL, 1 1/4" line with Crown-O-Matic, enclosed box substructure 11' 6" H, 600,000# setback
- Generators** (2) CAT 465 KW generator sets powered by CAT 15, (2) Gardner Denver 1260 CFM screw type air compressor powered by 30 HP electric motor.
- Mud Pumps** (2) Brewster B-1100T triplex powered by CAT D3508
- Rotating & Traveling Equipment** 27 1/2" X 54" rotary table, Bash Ross DBM-442, 250 ton block and hook w/ 42" sheaves grooved for 1 1/4" line, Oilwell PC 225 ton swivel
- Blowout Prevention** Hydril 11" 3000# annular BOP, Shaffer 11" 3000# double gate, Burnsco 88-gallon automatic accumulator, 5-station air actuated remote control panel, 2" X 3" 3000# complete manifold with gauges and chokes with 4" 5M# flex hose to manifold
- Doghouse, Water & Mud Tanks** Heated top doghouse, fuel tank – 10,000 gal, water tank - 513 bbl, (2) tank mud system 800 bbls with (2) 5" x 6" centrifugal pumps with low pressure system with (4) mud guns in each, (1) 50 bbl pill tank, (2) Swaco ALS linear shakers, National (10) cone desilter, cone desander
- Handling Tools/Auxiliary Equipment** 5 1/4" hex kelly 46', Pilot II automatic driller, Sure Shot 7<sup>th</sup> A-1 survey instrument, 12,000' capacity Martin-Decker type E weight indicator
- Drill Pipe & Drill Collars** 12,500' 4 1/2" 16.60# grade G drill Pipe, 4 1/2" XH, (21) 6 1/2" x 2 1/4" x 30' slick drill collars, 4 1/2" XH, (2) 8" drill collars