

Drilling Fluids,
Additives & Grouts



MINERAL EXPLORATION
ENVIRONMENTAL
GEOTECHNICAL
GEOTHERMAL
ROTARY
SONIC
HDD

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# DRILLING FLUIDS, GROUTS & ADDITIVES TABLE OF CONTENTS

DRILLING FLUIDS, ADDITIVES, GROUTS & SAND OVERVIEW	V3
DRILLING FLUIDS	4-6
DRILLING ADDITIVES	7-11
WELL DEVELOPMENT & REHABILITATION CHEMICALS	12-14
GROUTS	15-17
THERMALLY ENHANCED GROUTS	18-19
SAND & CEMENT  • Well Pack Sand  • Silica Sand  • Cement & Asphalt	21 22
DRILLING FLUID ACCESSORIES	
<ul> <li>Mud Scales/Balance, Marsh Funnels &amp; Cups</li> <li>Sand Content Test Kit &amp; Test Strip Indicators</li> <li>Grout Shoes &amp; Stinger</li> </ul>	26
<ul><li>Mini Mud Desander</li><li>Mud Cleaning Systems &amp; Trailer Packages</li></ul>	28
Grouters & Grout Mixers      Hose & Loops Reels	30





## **DRILLING FLUIDS, GROUTS, ADDITIVES & SANDS**



Hole Products offers a complete line of specially designed, high performance bentonite drilling fluids, additives, grouts, polymers, chemicals, sands, equipment, and accessories from the industry's leading manufacturers including Baroid, Cetco, NuWell, ChemGrout, GeoLoop, Johnson, PDS, Red Flint, Unimin, and more.

These products are specifically designed to improve drilling, grouting, well development and well completion performance in a variety of drilling industries including, construction, environmental, geotechnical, geothermal, horizontal directional drilling (HDD), mineral exploration, water well, and more.

All products are supported by our experienced team, offering the industry's best technical advice, service, and support.

Please contact your Hole Products representative for additional product information, data sheets, MSDS's or technical assistance.

Products listed in the catalog are representative of the most common industry sizes and styles. Please contact your Hole Products representative for additional product offerings.

#### **DRILLING FLUIDS**



Hole Products offers a complete line of high performance drilling fluids from industry leading manufacturers including Baroid, Cetco, Johnson, and more.

Drilling fluids are designed to optimize drilling performance by providing a number of functions including:

- Suspending, releasing, and removing cuttings from the borehole
- Maintaining borehole stability
- Sealing permeable formations
- Cooling and lubricating tooling
- Minimizing environmental impacts
- And more

Refer to product descriptions, or contact your Hole Products representative for assistance selecting the drilling fluids properly suited for your specific drilling application.

BAROID® DRILLING FLUIDS						
	PART #	UNIT SIZE	PRODUCT	PRODUCT DESCRIPTION		
AQUAGEL  BESTOWE  OIL WELLS  MALIBURTEN  Flat Granual  In a name of the second of the	3400084	50 lbs.	AQUAGEL®	AQUAGEL® bentonite functions as a viscosifier and filtrate reducer in freshwater drilling fluids.		
AQUAGE GOLD SEA.*	3400085	50 lbs.	AQUAGEL	AQUAGEL GOLD SEAL® contains no polymer additives or chemical treatments. It functions		
HALLET LATTON  And the state of	3400205	3000 lbs.	GOLD SEAL®	as a viscosifier and filtrate reducer in freshwater drilling fluids.		
No Photo Available	3451009	50 lbs.	BIO-BORE™	BIO-BORE™ concentrate is a free-flowing dry powder for use in various HDD drilling applications, particularly in situations where clay-based drilling fluids are restricted.		
BORE-GEO  FORMANDE  FORMAN	3400055	50 lbs.	BORE-GEL®	BORE-GEL® fluid system is a single sack, boring fluid system specially formulated for use in (HDD) applications.		
	3400131	14 lbs.	When mixed with fresh water, a	When mixed with fresh water, a small quantity of POLY BORE™ polymer provides a clear, solid-free,		
POLYBORE E	3400180	35 lbs.	POLY BORE™	viscous borehole stabilizing fluid.		
QUIK-GEL QUIK-GEL GUIK-GEL GUI	3400080	50 lbs.	QUIK GEL®	QUIK GEL® viscosifier imparts viscosity, fluid loss control and gelling characteristics to freshwater-based drilling fluids.		
WIK-GEL GOLD	3400081	50 lbs.	QUIK GEL GOLD™	QUIK GEL GOLD™ viscosifier provides an optimized grind size which results in easy mixing and rapid hydration characteristics.		
ZEOGEL  ATTAPACOTE  More and transport  More a	3400210	50 lbs.	ZEOGEL®	ZEOGEL® attapulgite clay helps provide high yield and rheological stability in systems that contain large concentrations of salt.		

CETCO® DRILLING FLUIDS					
	PART #	UNIT SIZE	PRODUCT	PRODUCT DESCRIPTION	
HYDRAUL-EZ*  BORNING TATALIZER AND LUBEALIZER  AND LUBEALIZER AND LUBEALIZER  TO THE COLUMN AND	3400145	50 lbs.	HYDRAUL-EZ®	HYDRAUL-EZ® is designed to maintain borehole integrity in horizontally drilled boreholes.	
PREMIUM  CAL  WANTED	3400115	50 lbs.	PREMIUM GEL®	PREMIUM GEL® is used for all types of freshwater mud rotary drilling where higher solids are desired.	
PURECOLD GEL  POLYMER OLD  POLY	3400133	50 lbs.	PUREGOLD® GEL	PUREGOLD® GEL is recommended for environmental rotary drilling where ambient groundwater quality and soil chemistry must be maintained.	
SUPER GEL-X' EXTRA MIGHT YELD DOBLING FLUID  MIGHT STATE AS,	3400110	50 lbs.	Super Gel X®	SUPER GEL X <sup>®</sup> may be used for all types of freshwater mud rotary drilling.	

OTHER MANUFACTURERS DRILLING FLUIDS						
	PART #	UNIT SIZE	PRODUCT DESCRIPTION			
Active Minerals  Active Minerals  Balance  FLORIGE H-V  Big-Tidd ath West Rab pilling for  West Rate and the second of the secon	3400132	50 lbs.	FLORIGEL® H-Y	FLORIGEL® H-Y is designed for use in drill fluids whenever ionic contamination from materials such as salts, gypsum, sea water and cement is encountered or anticipated.		
SUPER MUD	3400114	5 gal.	SUPER MUD	SUPER MUD is a liquid polymer slurry which is primarily used as a soil stabilizer to prevent sloughing and/or collapse of a borehole.		

#### **ADDITIVES**



Hole Products offers a complete line of high performance drilling fluid additives from the industry's leading manufacturers including Baroid, Cetco, and more.

Additives help improve the performance of drilling operations by controlling and improving drilling fluid properties.

Refer to specific product descriptions for additional details.

Additional additives and speciality products are available on request.

Drilling fluid additives are speciality products designed for specific applications. Please contact your Hole Products representative for assistance selecting additives, additional product literature, or MSDS's.

BAROID® ADDITIVES					
	PART #	UNIT SIZE	PRODUCT	PRODUCT DESCRIPTION	
ACF2*	3400021	5 gal.	AQF-2™	AQF-2 <sup>™</sup> foaming agent can be added to fresh water for air/foam, air/gel-foam, or mist drilling applications.	
AQUA-CLEAR PFD D	3400117	4 - 1 gal. jars	AQUA-CLEAR®	AQUA-CLEAR® PFD concentrated liquid polymer is a dispersant that provides superior mud and	
The second secon	3450037	5 gal.	PFD	sediment removal from the producing formation and gravel pack.	
IDP-500	3451010	5 lbs.	BARA-DEFOAM® 500	BARA-DEFOAM® 500 defoamer is designed for topical applications to break down foam associated with air/foam drilling operations.	
BARAFOS  INDERESAN  HALLIBLISTON  STORE OF THE PROPERTY OF THE	3400128	50 lbs.	BARAFOS®	BARAFOS® non-glassy, modified polyphosphate is used as a thinner and dispersant in freshwater drilling fluids and as an aid in water well development.	
AROID 41	3400060	50 lbs.	BAROID® 41	BAROID® 41 weighting material has a specific gravity of 4.1 and can be used to increase the density of drilling fluids up to 21 lbs./gal. (2.40 SG).	
CON DET	3400025	5 gal.	CON DET®	CON DET® is used as a wetting agent that promotes bit cleaning and reduces stickiness of clay.	
CORE-LUBE	3451012	25 lbs.	CORE-LUBE™	CORE-LUBE™ is a natural, linseed-based soft soap which is used as an inner tube lubricant and minimizes core blockage caused by fractured/ broken formations.	
DIAMOND SEAL*	3450026	10 lbs.	DIAMOND SEAL®	DIAMOND SEAL® is intended for use primarily as a lost circulation material for horizontal directional drilling.	
	3400035	1 gal.	EZ-MUD®	EZ-MUD® is used primarily as a borehole stabilizer. It can also be added to low-solids drilling fluids to	
E/MUD =	3400030	5 gal.	POLYMER EMULSION	help increase lubricity, fluid viscosity, and to help improve carrying capacity of air/foam injection fluids.	
O Memory (m. )	3400036	14 lbs.	EZ-MUD® DRY POLYMER	EZ-MUD® DP water-soluble polymer, disperses and dissolves in fresh water rapidly. When mixed with fresh water, EZ-MUD DP polymer hydrates quickly and forms a clear, viscous fluid.	
EZ-MUD® GOLD	3400098	10 lbs.	E7-MUD® COLD	EZ-MUD® GOLD can be mixed with water to improve drill hole stability for rotary	
All and a second	3400099	40 lbs.	EZ-MUD® GOLD	mud-circulation drilling and to improve carrying capacity for air or air/foam drilling.	

BAROID® ADDITIVES					
	PART #	UNIT SIZE	PRODUCT	PRODUCT DESCRIPTION	
EZAND <sup>®</sup> PAUS	3400094	5 lbs.	EZ-MUD® PLUS	EZ-MUD® PLUS is used primarily as a viscosifier and borehole stabilizer to help prevent reactive shales and clays from swelling and sloughing.	
No Photo Available	3451015	5 gal.	EP MUDLUBE®	EP MUDLUBE® modified tall oil fatty acid can be used to impart extreme pressure lubricating properties to drilling fluids.	
FUSE-11*	3451013	5 gal.	FUSE-IT®	FUSE-IT® is a fast-acting lost circulation material designed to help seal off loss circulation zones, allowing the operator to return to normal drilling activities.	
N-SEAL TO ACID SOLUBLE USE CHOILATON MATERIAL	3450010	30 lbs.	N-SEAL™	N-SEAL™ lost circulation material can be used as an additive for loss of circulation in concentrations up to 70 lbs./100 gal.	
NO-SAO*	3400040	20 lbs.	NO-SAG®	NO-SAG® is used to enhance the carrying capacity of both clay and polymer-base drilling fluids.	
NOS-LURED CONTROL CONT	3400350	5 gal.	NXS-LUBE®	NXS-LUBE® extreme pressure lubricant is specially formulated to help provide friction reduction in water-based fluids.	
PENETION E	3400065	5 gal.	PENETROL®	PENETROL® wetting agent is designed to help counteract the sticking tendencies of clay and enhances the rate of penetration.	
	3400020	5 gal.		QUIK-FOAM® foaming agent can be added to fresh, brine, or brackish water for air/foam,	
QUIK-FOAM"	3400015	55 gal.	QUIK-FOAM®	air/gel-foam, or mist drilling applications.	
COUR MUD® D.50 E	3400185	5 gal.	QUIK-MUD® D-50	QUIK-MUD® D-50 liquid polymer dispersion is used primarily as a viscosifier and borehole stabilizer to prevent reactive shale and clay from swelling and sloughing.	
OUK MUO* GOLD	3400355	10 lbs.	QUIK-MUD®	QUIK-MUD® GOLD clay/shale stabilizer assists in reducing swelling and/or dispersion. It also	
The state of the s	3400356	40 lbs.	GOLD	promotes borehole stabilization in water sensitive formations. It also assists in minimal rotational torque and circulating pressure.	
000	3400362 20 lbs.		QUIK-TROL® GOLD polymer, when added to an		
CULTURE TO THE PARTY OF THE PAR	3400215	40 lbs.	QUIK-TROL® GOLD	AQUAGEL®, QUIK-GEL®, or BORE-GEL® slurry, yields a low filtrate drilling fluid system suitable for	
Parameter Control of C	3400043	50 lbs.		drilling in water sensitive formations.	

BAROID® ADDITIVES						
	PART #	UNIT SIZE	PRODUCT	PRODUCT DESCRIPTION		
	3400044	20 lbs.		QUIK-TROL® GOLD LV filtration control additive, when added to an AQUAGEL, QUIK-GEL		
GUILCTROL GOLD LV	3400046	40 lbs.	QUIK-TROL® GOLD LV	or BORE-GEL slurry, yields a low filtrate drilling fluid system suitable for drilling in water		
Tax marrier List	3400220	50 lbs.		sensitive formations.		
CONNECTOR S	3400045	20 lbs.		QUIK-TROL® LV polymer, when added to a QUIK- GEL or BORE-GEL slurry, yields a drilling mud		
	3400225	40 lbs.	QUIK-TROL® LV	system suitable for drilling in sandy formation.		
OCI Mires	3450005	50 lbs.	SODA ASH	SODA ASH granular powder is primarily used to help condition and soften make-up water and raise pH.		
SYSTEM FLOCSMO	3400360	5 gal.	SYSTEM FLOC 360®	SYSTEM FLOC 360® polymeric flocculant is used to flocculate clays and shales encountered in drilling operations and facilitate disposal of water-based drilling fluids.		

CETCO® ADDITIVES				
	PART #	UNIT SIZE	PRODUCT	PRODUCT DESCRIPTION
CAS COTES	3400340	5 gal.	CLAY CUTTER™	CLAY CUTTER™ is an ideal additive for HDD bores in reactive clay soils.
ORAL TRACE	3400086	5 gal.	DRILL-TERGE™	DRILL-TERGE™ is designed to control interfacial tension and inhibit the hydration and dispersion of clay and shale.
TOTAL SECTION AND ADDRESS OF THE PARTY OF TH	3400137	14 lbs.	INSTA-VIS™ DRY	INSTA-VIS DRY™ improves drilling efficiency in both horizontal and vertically drilled holes by controlling shales and clays.
INSTANS FILES  ORDER OF THE STANDARD ST	3400108	5 gal.	INSTA-VIS™ PLUS	INSTA-VIS™ PLUS is a multi-functional liquid polymer designed to improve drilling efficiency in both horizontal and vertical drilled holes.
LIQUI-TROL*	3400068	5 gal.	LIQUI-TROL™	LIQUI-TROL™ vicosifer is a modified natural cellulosic polymer, in an ultra-clean oil. It is suitable for drilling in water sensitive formations.
TABLES TO THE PARTY OF THE PART	3400333	7.5 lbs.	PROSHOT™	PROSHOT™ is an easy mixing, water soluble, polymer used in horizontal and vertical drilling applications.
Also the	3400334	2 lbs.	REL PAC®	REL-PAC® is designed to increase borehole stability in a variety of rotary and horizontal drilling applications.
SUTE NO.	3400335	5 gal.	SUPER PAC™	SUPER PAC <sup>™</sup> is an easy mixing, liquid polymer that enhances the properties of a bentonite drilling fluid.
SUPER TICKY  TO AN OF THE MEMORY  COMPANY  COMPA	3400135	45 lbs.	SUPER THIN™	SUPER THIN™ is a highly concentrated additive which reduces drilling fluid viscosity, and assist in settling solids.
	3400336	2 lbs.	SUSPEND-IT™	SUSPEND-IT <sup>™</sup> is designed to enhance gel strength of the drilling fluid for improved suspension and transporting of drill cuttings, gravel, and cobble on long bores.
MATERIA (R.	3400116	25 lbs.	VARIFLO® QD	VARIFLO® QD is a coarse granular, high-viscosity blend of guar gum formulated for easy and quick dispersion in drilling applications.
VINANCAN PAIS	3400119	43 lbs.	VERSAFOAM® PLUS	VERSAFOAM® PLUS is an ultra high-yielding, biodegradable, liquid foaming agent for use in fresh and saltwater air rotary drilling.

## WELL DEVELOPMENT & REHABILITATION CHEMICALS



Hole Products offers a complete line of Baroid® and Johnson® well development and rehabilitation chemicals. These chemicals are designed for removing minerals and/or biological debris (mud and sediment) to develop new wells and/or rehabilitate existing wells. Chemicals can help improve well productivity, lengthen the life of well, and lower operating cost by improving pumping efficiency.

Well chemicals are speciality products designed for specific applications. Refer to specific product descriptions for additional details.

Please contact your Hole Products representative for detailed product specifications or MSDS's.

BAROID® CHEMICALS					
	PART #	UNIT SIZE	PRODUCT	PRODUCT DESCRIPTION	
AGUA-CLEAR AE	3400123	5 gal.	AQUA-CLEAR® AE	AQUA-CLEAR® AE liquid blend of acids and acid enhancers are formulated to control bacterial slime contamination due to the presence of iron-related and sulphate-reducing bacteria.	
AGUA-CEAN WAY A	3400138	50 lbs.	AQUA-CLEAR® MGA	AQUA-CLEAR® MGA dry blend of granular acid and additives is used in the removal of iron, manganese and carbonate scale.	
AGUACLEAT PFD D	3400117	4 - 1 gal. jars	AQUA-CLEAR® PFD	AQUA-CLEAR® PFD concentrated liquid polymer is a dispersant that provides superior mud and	
	3450037	5 gal.		sediment removal from the producing formation and gravel pack.	

NUWELL™ REHABILITATION PRODUCTS						
	PART #	UNIT SIZE	PRODUCT	PRODUCT DESCRIPTION		
	3451002	4 - 1 gal. jars		NUWELL™ 220 is designed to remove mud and		
No.West 220	3451001	5 gal.	NUWELL™ 220 DISPERSANT	clay from the well environment. It successfully develops new wells without using phosphate		
The second secon	3451020	30 gal.	POLYMER	and rehabilitates old wells plugged with clays,		
Table of the second of the sec	3451025	55 gal.		silts and fines.		
	3450040	5 gal.	NUWELL™ 310	NUWELL™ 310 is used for breaking down biofilm and dispersing mineral salts. It may		
Nowell state of the state of th	3450043	30 gal.	BIOACID POLYMER	be used to treat potable water systems and related equipment in addition to large municipal		
	3450045	55 gal.	TOETHER	and industrial wells.		
	3451030	4 - 1 gal. jars	NUWELL™ 320 BIOCAUSTIC DISPERSANT	NUWELL™ 320 is enhances solubility of		
Noved 320	3451035	5 gal.		minerals and biological debris when used with caustic products for cleaning wells, potable		
	3451040	30 gal.		water distribution lines or other structural		
Manager	3451045	55 gal.		systems.		
	3451050	4 - 1 gal. jars		NUWELL™ 400 is for use over a wide pH range. It is ideal for improving penetration of hard		
1 Note County	3451004	5 gal.	NUWELL™ 400 NON-IONIC			
TOWNED 400	3451055	30 gal.	SURFACTANT	deposits or for wetting surfaces to be cleaned.		
	3451060	55 gal.				
	3451065	4 - 1 gal. jars		NUWELL™ 410 is used with hypochlorite to		
Animal Cressed Net Well 410	3451007	5 gal.	NUWELL™ 410 CHLORINE	increase effectiveness of chlorination. It		
The second secon	3451006	30 gal.	ENHANCER	increases the hypochlorous acid and bacteriological activity.		
The state of the s	3451005	55 gal.		bacteriological activity.		
	3451070	4 - 1 gal. jars		NUWELL™ 500 is a concentrated crystal that		
ANANA Owned Nat Well 500	3451075	5 gal.	NUWELL™ 500	is used to neutralize chlorine solutions before their disposal. It is used on the surface, after		
TOTAL SIVE	3451080	30 gal.	CHLOROUT	the well or system discharge has been		
Unique.	3451085	55 gal.		pumped into a tank.		

NUWELL™ ACIDS					
	PART #	UNIT SIZE	PRODUCT	PRODUCT DESCRIPTION	
	3450015	9 lbs.		NUNVELLIM 100 is a polletized acid designed for	
NuWell 100	3450055	45 lbs.	NUWELL™ 100	NUWELL™ 100 is a pelletized acid designed for pouring directly into the well. NuWell 100 is	
	3450060	70 lbs.	PELLETIZED ACID	best for wells with short to moderate lengths of screen at the bottom.	
To Construct of the Construction of the Constr	3450065	450 lbs.		or screen at the bottom.	
	3450070	50 lbs.	NUWELL™ 110 GRANULAR ACID	NUWELL™ 110 granular acid blend is used for	
Nowed 110	3450016	80 lbs.		cleaning residential, irrigation, commercial, and municipal water wells.	
	3450017	450 lbs.		municipal water wens.	
And the Barrier of th	3450053	15 gal.	NUWELL™ 120	NUWELL™ 120 liquid food-grade phosphoric mineral acid which effectively removes	
	3450050	55 gal.	LIQUID ACID	common mineral deposits found in wells, filter beds, and water system equipment.	

#### **GROUTS**



Hole Products offers a variety of bentonite based grouts from the industry's leading manufacturers including Baroid, Cetco, PDS, and more. Grouts are available as ground and naturally sized bentonite clay or blended with additives for increased dispersibility. Time released bentonite pellets are also available to prevent swelling upon contact with water for a specified period of time.

Choosing the correct grout for your drilling project is an important decision. The choice must comply with local, state, and federal code, and it is dependent upon a variety of factors including subsurface geology and water characteristics.

Hole Products has the expertise necessary to assist in recommending the proper grout for your drilling projects.

Refer to product description or contact your Hole Products representative for assistance selecting the grout(s) properly suited for your specific drilling application.

	BAROID® GROUTS							
	PART #	UNIT SIZE	PRODUCT	PRODUCT DESCRIPTION				
OU A SUBSINGUE OF	3400070	50 lbs.	AQUAGUARD®	AQUAGUARD® is designed for sealing the annular space around monitor or water well casing. Can develops a 30% solid slurry.				
BENSEA'  BENSEA'  FRANCISCO  FRAN	3400075	50 lbs.	BENSEAL®	BENSEAL® granular (8-mesh), used in sealing and grouting of well casing and earthen structures. Benseal has a high swelling capacity and allows for hole re-entry.				
	3400230	5 gal.	1/4" BENTONITE PELLETS					
MANOT RECOVER FRANCIS SET (	3400235	5 gal.	1/2" BENTONITE PELLETS	BENTONITE PELLETS are used to seal wells, boreholes, and monitoring well.				
TALLEGATON .	3400150	5 gal.	3/8" BENTONITE PELLETS					
BORE GROUP	3400056	50 lbs.	BORE-GROUT™	BORE-GROUT™ is a bentonite grout designed for use in grouting boreholes containing horizontally installed ground source heat loops.				
ASING-SEAL AND ASING ASI	3400096	50 lbs.	CASING-SEAL™	CASING-SEAL™ bentonite (8 to 14 mesh), is an effective sealing and plugging material for sealing a leaking pond, and for use as a clay liner.				
HOLEPLUG William Community of the Commu	3400005	50 lbs.	3/8" HOLEPLUG®	HOLEPLUG® is sized and graded chip material used to seal and plug earthen boreholes.				
CONF. GROUP CONF.	3400050	50 lbs.	QUIK-GROUT®	QUIK-GROUT® is designed for grouting water wells, monitoring wells, and for plugging holes. Can develop a 20% active slurry.				

<sup>- 3,000</sup> lbs. super sacks are available for specific products on request.

			CETCO® GROUTS	
	PART #	UNIT SIZE	PRODUCT	PRODUCT DESCRIPTION
	3400112	5 gal.	1/4" BENTONITE PELLETS	BENTONITE PELLETS are designed to seal
O TOTAL MARKET M	3400105	5 gal.	3/8" BENTONITE PELLETS	wells, boreholes, and monitoring wells.
PUREGOLD' MEDIUM CHIPS HOL ASMONICATI MATERIAL  OFFI  MEDIUM CHIPS HOL ASMONICATI MATERIAL  OFFI  MEDIUM CHIPS HOL ASMONICATI MATERIAL  MEDIUM CHI	3400106	50 lbs.	PUREGOLD® CHIPS	PUREGOLD® CHIPS are used for sealing shallow boreholes and seismic shot holes, decommissioning wells, providing an interface between gravel pack and bentonite.
PUREGUL GROUT  LEAT-ASSEMBLE CONSIDERATE C	3400107	50 lbs.	PUREGOLD® GROUT	PUREGOLD® GROUT is engineered to form a contaminant resistant seal without affecting groundwater chemistry. To achieve a 30% solids slurry, add one 50 lb bag of grout to 14 gallons of freshwater.
WELLE CRUMBLES:  CANADA MATERIAL  AMERICANA  AMERICANA	3400109	50 lbs.	ACCU-VIS™/ BELLE CRUMBLES™	ACCU-VIS <sup>™</sup> /BELLE CRUMBLES <sup>™</sup> is a quick activating liquid polymer which provides a way to seal and grout boreholes, well casings, and earthen structures.
CETCO* GRANULAR GROUT  MON-SQUES GRANULAR GROUT  MON-SQUES GRANULAR GROUT  MON-SQUES GROUNTSTORT GROUTSTORT GR	3400111	50 lbs.	GRANULAR GROUT	GRANULAR GROUT offers reduced friction going down the tremie pipe, and has a firm set-up with little settling.
CETCO GROUT  MOST SOLUS  ENTERT HE SOLUS  MOST SOLUS	3400101	50 lbs.	VOLCLAY® GROUT CG-50	VOLCLAY® GROUT CG-50 is recommended for slurry wall applications. VOLCLAY® GROUT CG-50 can be used to seal earthen structures, general sealing, and slurry wall construction.

			PDS GROUTS	
	PART #	UNIT SIZE	PRODUCT	PRODUCT DESCRIPTION
	3400118	50 lbs.	3/8" BENTONITE CHIPS	
PEL-PLUG 0	3400104	5 gal.	1/2" BENTONITE PELLETS	Sealant to seal wells, boreholes, and monitoring wells.
	3400105	5 gal.	3/8" BENTONITE PELLETS	

PDS TIME RELEASE PELLETS						
	PART #	UNIT SIZE	PRODUCT	PRODUCT DESCRIPTION		
	3400103	5 gal.	1/4" COATED BENTONITE PELLETS TR30			
	3400139	5 gal.	1/4" COATED BENTONITE PELLETS TR90	Coated bentonite pellets prevent swelling		
PEL-PLUB (PDS)	3400130	5 gal.	1/2" COATED BENTONITE PELLETS TR30	upon contact with water for a specific time period. Most suitable for use in deep		
	3400113	5 gal.	3/8" COATED BENTONITE PELLETS TR30	hole sealing.		
	3400136	5 gal.	3/8" COATED BENTONITE PELLETS TR60			

#### THERMALLY ENHANCED GROUTS



Hole Products offers a complete line of thermally enhanced grouts with various thermal conductivity values from the industry's leading manufacturers including Baroid, Cetco, GeoPro, and more.

Thermally enhanced grouts are specially formulated bentonite materials, designed specifically for use in grouting boreholes containing geothermal heat loops. They easily mix into a uniform slurry with low permeability that allows for efficient heat transfer and develops a permanent flexible seal.

Additional thermally enhanced grouts and additives are available to meet specific engineering requirements.

3,000 lb super sacks are available for specific products.

See product descriptions or contact your Hole Products representative for assistance selecting the thermally enhanced grouts properly designed for your next geothermal drilling project.

BAROID® THERMALLY ENHANCED GROUTS				
	PART #	UNIT SIZE	PRODUCT	PRODUCT DESCRIPTION
AMOTHERAS	3400140	50 lbs.	BAROTHERM® GOLD	BAROTHERM® GOLD a bentonite material designed for use in grouting boreholes containing ground source heat loops. When combined with silica sand at various concentrations yields grout w/thermal conductivity values ranging between 0.4 and 1.2 BTU/hr • ft • °F (0.69-2.08 watts/m - °C).
CAROTHERM COLD	3400142	50 lbs.	BAROTHERM® GOLD 550 1.0	BAROTHERM® GOLD 1.0 a preblended mixture of sodium bentonite and high-purity silica sand designed for grouting boreholes containing ground source heat loops. Thermal conductivity of 1.0 BTU/hr • ft • (1.73 watts/m - °C).
MOTHER COLD TO	3400143	50 lbs.	BAROTHERM® GOLD 523 1.2	BAROTHERM® GOLD 1.2 is designed for use in grouting boreholes containing ground source heat loops. Thermal conductivity of 1.2 BTU/hr • ft • (2.08 watts/m - °C).

	CETCO® THERMALLY ENHANCED GROUTS			
	PART #	UNIT SIZE	PRODUCT	PRODUCT DESCRIPTION
GESTIERMAL GROUT THERMALLY CONDUCTIVE GROUT OF THE WARD AND THE TO U.S.	3400122	50 lbs.	GEOTHERMAL GROUT™	GEOTHERMAL GROUT™ is an easy pumping grout that has been carefully developed to efficiently suspend solids (silica sand) for enhanced thermal conductivity. When combined with silica sand at various concentrations yields grout w/thermal conductivity values ranging between 0.4 and 1.00 BTU/hr • ft • °F (0.68-1.69 watts/m - °C).
GETCO HIGH TC GEOTHERMAL GROUT HIGH TALEBUT	3400240	50 lbs.	HIGH TC GEOTHERMAL GROUT™	HIGH TC GEOTHERMAL GROUT™ is an easy pumping grout that has been developed to efficiently suspend solids (silica sand) for enhanced thermal conductivity. When combined with silica sand at various concentrations yields grout w/thermal conductivity values ranging between 0.4 and 1.21 BTU/hr • ft • °F (0.68-2.05 watts/m - °C).

GEOPRO THERMALLY ENHANCED GROUTS				
	PART #	UNIT SIZE	PRODUCT	PRODUCT DESCRIPTION
BH20	3400090	50 lbs.	BH 20 GROUT	BH 20 GROUT mixed as a 20% - 25% solids grout, BH20 sets into a semi-rigid plug well suited for sealing well casings, decommissioning abandoned wells and for geothermal heating and cooling systems. Thermal conductivity of 0.40 - 0.42 BTU/hr • ft.
To Life	3400095	50 lbs.	THERMAL GROUT LITE	THERMAL GROUT LITE is designed to optimize the performance of ground heat exchangers for the geothermal heating and cooling industry. Thermal conductivity of 0.45 - 1.00 BTU/hr • ft.
70 Solect	3400100	50 lbs.	THERMAL GROUT SELECT	THERMAL GROUT SELECT is designed to optimize the performance of ground heat exchangers for the geothermal heating and cooling industry. Thermal conductivity of 0.45 - 1.20 BTU/hr • ft.

#### **SAND & CEMENT**



Hole Products offers a complete range of quality well pack sand, silica sand, cement, and asphalt for use on a variety of drilling projects.

Well Pack Sand - Our complete line of well pack sand is available in a variety of slot sizes for use with any screen and in any ground formation.

**Silica Sand** - Silica sand is a critical component in geothermal grout mixtures for achieving required thermal conductivity values. We offer a complete line of premium silica sand in a variety of particle sizes to meet the requirements of any geothermal project.

**Cement** - We offer a complete line of concrete products for grouting and well completion applications including, Portland cement, calcium cement, concrete mix, and more.

**Asphalt** - We offer a variety of asphalt repair products to easily and permanently repair roads.

Please contact your Hole Products representative for assistance selecting the sands and cements properly suited for your specific application and to learn more about the availability of additional products.

#### **WELL PACK SAND**

Hole Products offers a full range of fine, medium, and coarse well pack sands to complement any well screen slot size and ground formation. All sands are washed, kiln dried, and screened, ensuring a clean and uniform product. Additional sand sizes available on request.

WELL PACK SAND		
PART #	UNIT SIZE	PRODUCT
3500016	50 lbs.	#0 WELL SLOT SAND
3500110	100 lbs.	#0 WELL SLOT SAND
3500015	50 lbs.	#1 WELL SLOT SAND
3500115	100 lbs.	#1 WELL SLOT SAND
3500120	50 lbs.	#7 WELL SLOT SAND
3500017	100 lbs.	#7 WELL SLOT SAND
3500001	50 lbs.	#10 WELL SLOT SAND
3500002	100 lbs.	#10 WELL SLOT SAND
3500050	50 lbs.	#15 WELL SLOT SAND
3500099	100 lbs.	#15 WELL SLOT SAND
3500020	50 lbs.	#20 WELL SLOT SAND
3500005	100 lbs.	#20 WELL SLOT SAND
3500035	50 lbs.	#30 WELL SLOT SAND
3500036	100 lbs.	#30 WELL SLOT SAND
3500025	50 lbs.	#40 WELL SLOT SAND
3500010	100 lbs.	#40 WELL SLOT SAND
3500027	50 lbs.	#50 WELL SLOT SAND
3500026	100 lbs.	#50 WELL SLOT SAND
3500098	50 lbs.	#60 WELL SLOT SAND
3500096	100 lbs.	#60 WELL SLOT SAND
3500100	50 lbs.	#80 WELL SLOT SAND
3500125	100 lbs.	#80 WELL SLOT SAND
3500101	50 lbs.	#90 WELL SLOT SAND
3500130	100 lbs.	#90 WELL SLOT SAND
3500073	50 lbs.	6/20 WELL SLOT SAND
3500070	50 lbs.	20/30 WELL SLOT SAND
3500071	50 lbs.	30/45 WELL SLOT SAND
3500072	50 lbs.	30/65 WELL SLOT SAND
3500075	50 lbs.	70/200 WELL SLOT SAND

#### **SILICA SAND**

Hole Products offers a full line of premium quality silica sands available in 50 lb. or 100 lb. bags and 3,000 lb. super sacks. Silica sand is combined with geothermal grout at various concentrations to help yield a specific thermal conductivity rating.

Bulk dump loads and additional sand sizes are available on request.



SILICA SAND		
PART #	UNIT SIZE	PRODUCT
3500043	50 lbs.	4030 SILICA SAND
3500135	100 lbs.	4030 SILICA SAND
3500046	3,000 lbs. SUPER SACK	4030 SILICA SAND
3500140	50 lbs.	4070 SILICA SAND
3500145	100 lbs.	4070 SILICA SAND
3500150	3,000 lbs. SUPER SACK	4070 SILICA SAND
3500003	50 lbs.	5010 SILICA SAND
3500155	100 lbs.	5010 SILICA SAND
3500097	3,000 lbs. SUPER SACK	5010 SILICA SAND
3500044	50 lbs.	5020 SILICA SAND
3500160	100 lbs.	5020 SILICA SAND
3500165	3,000 lbs. SUPER SACK	5020 SILICA SAND
3500040	50 lbs.	5030 SILICA SAND
3500170	100 lbs.	5030 SILICA SAND
3500045	3,000 lbs. SUPER SACK	5030 SILICA SAND
3500175	50 lbs.	5040 SILICA SAND
3500039	100 lbs.	5040 SILICA SAND
3500180	3,000 lbs. SUPER SACK	5040 SILICA SAND

#### **CEMENT & ASPHALT**

Hole Products offers a variety of cement, concrete, and asphalt products for grouting, well completion, and other drilling related applications.

CEMENT	CEMENT			
PART #	UNIT SIZE	PRODUCT		
3500066	47 lbs.	PORTLAND CEMENT TYPE 1		
3500065	94 lbs.	PORTLAND CEMENT TYPE 1		
3500061	94 lbs.	PORTLAND CEMENT TYPE H		
3500060	100 lbs.	CALCIUM CEMENT W60		
3500068	55 lbs.	MICROFINE CEMENT MC 500		

CONCRETE		
PART #	UNIT SIZE	PRODUCT
3500089	40 lbs.	READY MIX
3500079	60 lbs.	READY MIX
3500080	80 lbs.	READY MIX
3500095	50 lbs.	FAST SET
3500103	70 lbs.	FAST SET
3500104	55 lbs.	FAST SET DOT
3500090	80 lbs.	FIBER REINFORCED

ASPHALT		
PART #	UNIT SIZE	PRODUCT
3500093	50 lbs.	ASPHALT PATCH
3500094	60 lbs.	ASPHALT PATCH

## **EQUIPMENT & ACCESSORIES**



Hole Products offers a wide range of equipment and accessories to complement our drilling fluids, additives, grouts, and sands product offerings.

Our range of products includes everything successful drilling and grouting operations need to complete projects on time and under budget.

Custom designed and manufactured grouting equipment and accessories are available to fit any requirement.

Please contact your Hole Products representative for specific product information and to learn more about the availability of additional drilling fluid and grouting equipment and accessories.

### **MUD SCALE/BALANCE**

Hole Products offers durable mud scales/balances to provide simple and accurate measurements of drilling fluid density (weight). Our complete kits include a high impact plastic case to protect the scale/balance during transport and to provide a solid working platform.

MUD SCALE/BALANCE				
PART #	DESCRIPTION			
3710000	10000 COMPLETE MUD SCALE			



Marsh funnels and measuring cups are used to determine an accurate measure of the drilling fluid's viscosity. Viscosity is a measurement of a fluid's resistance to flow; the greater the resistance, the higher the viscosity.

FUNNEL & MEASURING CUP		
PART #	DESCRIPTION	
3710001	MARSH FUNNEL	
3710002	MARSH CUP	



#### SAND CONTENT TEST KIT

Sand content kits measure the percentage of sand (by volume) suspended within the drilling fluid. Excessive sand may result in the deposition of a thick filter cake on the wall of the hole. High sand content may also cause excessive abrasion affecting pump parts and pipe connections.

SAND CONTENT TEST KIT		
PART #	DESCRIPTION	
3710033	SAND CONTENT TEST KIT	



#### **TEST STRIP INDICATORS**

Quick and accurate field tests for determining pH, iron, and calcium levels in drilling fluids and water.

PH Test Strips - Field measurement of drilling fluid pH and adjustments to the pH are fundamental to the effectiveness of drilling fluids and additives.

**Iron Test Strips -** Used to determine the iron content in water.

**Hardness Test Strips**- Used to measure the hardness of water.

**Calcium Test Strips -** Used to determine the calcium content of the make-up of water and soda ash (sodium carbonate).

TEST STRIP INDICATORS		
PART #	DESCRIPTION	
3710005	PH TEST STRIPS - 50/BTL	
3710006	IRON TEST STRIPS - 100/BTL	
3710075	HARDNESS TEST STRIPS - 50/BTL	
3710090	CALCIUM TEST STRIPS - 25/BTL	



#### **GROUT SHOES**

Hole Products offers a wide range of custom grout shoes manufactured from aluminium and made to any size to fit your specific project requirements.

Grouts shoes are designed to simplify the process of grouting casing into overburden formations.

#### **Grouting:**

The grout shoe is welded to the end of the casing and installed into the borehole. A stinger is attached to a tremie line and lowered into the casing until the stinger o-rings seat into the grout shoe funnel, providing a tight seal.

As grout is pumped through the tremie line, it exits the grout shoe side outlets and is forced up the annulus of the borehole. Double ball valves prevent the grout from traveling back up into the I.D. of the casing.

Upon completion of the grouting process, the aluminium grout shoe is simply drilled out, and the borehole can continue into bedrock.

GROUT SHOES			
PART #	DESCRIPTION		
3951004	5" GROUT SHOE		
3951005	6" GROUT SHOE		
3951010	8" GROUT SHOE		
3951015	10" GROUT SHOE		
3951025	12" GROUT SHOE		
3951030	14" GROUT SHOE		
3951035	16" GROUT SHOE		
3951040	18" GROUT SHOE		
3951045	20" GROUT SHOE		
3951050	24" GROUT SHOE		
3951051	26" GROUT SHOE		

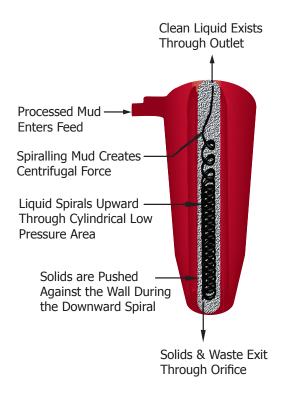


STINGER		
PART #	DESCRIPTION	
3951000	2" FEMALE NPT	



#### MINI-MUD DESANDER

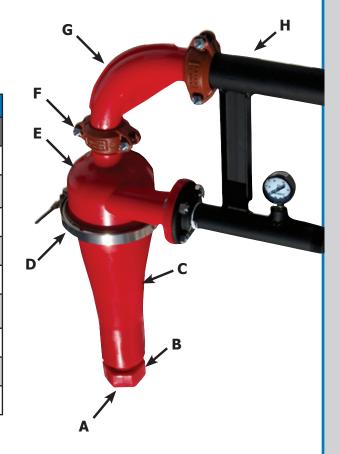
The mini-mud desander is designed to separate fine particles from your drilling fluids that would otherwise be recirculated. Maintaining clean drilling fluid with good density and weight will help increase the life of pumps, swivels, and hoses, and ensure cuttings are carried away from the borehole.



#### How the Mini-Mud Desander Works

There are no moving parts in the cone. Centrifugal forces are generated within the cone by high speed rotation of the drilling fluid which separates solids from liquids. The mini-desander has two exits on the axis; the smaller on the bottom (underflow) and larger (outlet) at the top. The underflow is used for denser or thicker waste products, while the overflow takes the cleaned fluid up the center of the cone and back into the circulating system for reuse.

MINI MUD DESANDER			
ITEM	PART #	DESCRIPTION	
A-H	3710010	COMPLETE MINI MUD DESANDER	
А	3710011	ADJUSTABLE ORIFICE (Underflow located at this hole)	
В	3710016	ADJUSTABLE NUT	
С	3710017	BOTTOM CONE SECTION	
D	3710024	STAINLESS STEEL BAND CLAMP 5"	
E	3710023	TOP CONE SECTION (Overflow located at the neck of this opening)	
F	3710015	VITAULIC W/ EPDM GASKET	
G	3710013	ELBOW 90°	
Н	3710100	PIPE ASSEMBLY	



#### **MUD CLEANING SYSTEMS**

Hole Products offers a complete line of MudSlayer® portable mud cleaning systems. These systems are available in a range of sizes for use on all drill sites.

These portable systems are designed to clean and recycle drilling mud by removing rocks and sand, thus reducing wear and tear on pumps, tooling and other parts. In addition, mud cleaning systems eliminate the need for settling pits and mud pans, and reduce the amount of water needed to drill, thus helping to maintain clean and safe jobsites.

Please contact your Hole Products representative for additional details.



#### TRAILER PACKAGES

Hole Products offers a variety of custom trailer packages, designed specifically for environmental, geothermal, and water well grouting operations.

Custom trailer packages give you ability to choose the pump, hose reel, water tank, pallet table, accessories, and trailer size that best fits your specific requirements.



#### **GROUTERS**

Hole Products offers custom designed powerful grout pumps in a variety of sizes and styles and with multiple accessory options. Grouters help by increasing grouting productivity, which inturn increase overall project profits.

Pumps are available with numerous mixing tank sizes, hose reel options, gas or diesel motors, and with a variety of custom accessories to fulfill even the most demanding gallons per minute, weight, and footprint requirements.

Please contact your Hole Products representative for additional details.



#### **GROUT MIXER**

Hole Products variable speed, high-efficiency grout mixer is designed to provide rapid mixing of drilling fluids and grouts. Handle(s) provide for easy handling and/or resting the mixer on the mixing tank during the mixing cycle.

GROUT MIXER		
PART #	DESCRIPTION	
3710025	GROUT MIXER	



#### **HOSE REELS**

Hole Products offers a full range of versatile, efficient, and durable hose reels.

Hose reels come standard with a powder coated finish, quick couplers for hydraulics, and are available with a variety of options including small or large diameter spools, remote control, depth counter, and more.

Hose/Loop reel combos are available on request.

Please contact your Hole Products representative for additional details.



#### **LOOP REELS**

Hole Products offers a variety of durable, powered and non-powered loop reels with small and large diameter spools.

Loop reels feature adjustable width and diameter, making them suitable for a variety of applications.

Large loop reels feature fork lift pockets on both ends of the framework to allow for jobsite mobility.

Loop/Hose reel combos are available on request.



NOTES		