

**UPDATE ON GISP2
DRILLING AND OPERATIONS**



**Polar Ice Coring Office
University of Alaska Fairbanks
Fairbanks, Alaska 99775-1710**

**PICO
OR-90-1**

December 1990

***PICO is operated by the University of Alaska Fairbanks under contract to the National Science Foundation, Division of Polar Programs.**

UPDATE ON GISP2 DRILLING AND OPERATIONS

DRILLING

GENERAL

- Item 1:** Rust forming on drill component.
- Status:** Drill components will be protected with a rust preventative which is already on site. After the rust preventative has been applied the components will be placed in polyethylene tubing for shipment.
- Item 2:** Potential contaminants from the drill in the drill fluid.
- Status:** See attached list of potential contaminants. Samples of the butyl acetate used in the motor test are available. What quantity is required?

DRILL TEST

- Item 1:** Drill test at CRREL.
- Status:** The drill test at CRREL has been cancelled. The drill components will be tested at UAF (see attached schedule).

ANTI-TORQUES

- Item 1:** New anti-torque design.
- Status:** 2 designs are completed and will be fabricated by Kozycki; see drawings.

CUTTERS

- Item 1:** Improve cutter performance.
- Status:**
- a) Design of the pre-cutter head is complete, Kozycki and PICO working on drawings, Kozycki will fabricate.
 - b) Cutters for "old" head have been ordered.
 - c) Modifications to "old" heads have been completed.

BOREHOLE CAMERA AND FISHING TOOLS

- Item 1:** Develop a system to see what may be down the hole and retrieve it if necessary.
- Status:** We have two possible vendors for the camera, it is not yet on order. Kozycki to fabricate fishing tools. See examples.

PUMP SECTION

Item 1: Butyl acetate eats EPDM rubber stators.

Status: 2 Teflon stators are on order and we have 2 EPDM stators as backups.

CHIP REMOVAL AND DRILL HANDLING

Item 1: Improve chip removal from screen sections.

Status: A new coupling has been designed and enough for one drill string have been fabricated. After testing at UAF, the remaining couplings will be fabricated.

Variable frequency, variable amplitude vibrators have been located and will be purchased. They will probably not be available for the drill test in January but will be tested before the field season.

PADDING, "SHOCK ABSORBING" AND CORE HANDLING

Item 1: Improve the tilt table and the core handling system.

Status: Concept drawings for the new tilt table are complete and the fabrication drawings will be finished by Jan. 1.

WINCH

Status: The winch is scheduled for delivery April 15.

BOREHOLE DEPTH MEASUREMENT AND INSTRUMENTATION

Item 1: We need accurate depth measurements.

Status: The drill cable will be used to measure the hole depth on the way up. We need to discuss with the SMO whether another type of measuring device is necessary.

OPERATIONS

GENERAL

Item 1: Tracking purchases from requisition to delivery.

Status: A tracking system is now in place. See tracking system computer printout.

- Item 2:** Research the possibilities of an air-drop.
- Status:** A unit out of Dover handles air-drops. Cost effectiveness is still being investigated.
- Item 3:** Confusion on medical forms.
- Status:** The medical forms have been finished and are in the process of being printed. See attached forms for examples.
- Item 4:** Lack of an up-to-date site map.
- Status:** Site map is now available. Several copies will be given to the SMO.

SCIENCE TRENCH

- Item 1:** The roof needs to be stabilized.
- Status:** Malcom Miller from CRREL has been contacted. After Wayne Tobiasson returns from Antarctica PICO and SMO will continue discussions.
- Item 2:** We need a more efficient method of removing snow blocks from the science trench to lower the floor.
- Status:** We are still investigating options.
- Item 3:** Another HNU butyl acetate detector is required.
- Status:** Awaiting approval of specifications. Tom Gosink is calibrating the existing HNU unit.
- Item 4:** Additional space is required for "science workspace."
- Status:** We have investigated options for a new structure. A decision must be made on size and type.

FREEZER AND PRE-CPL CORE STORAGE

- Item 1:** The freezer should be enlarged to accommodate core.
- Status:** We have received quotes. P.O. is being processed.
- Item 2:** Additional core storage space is required.
- Status:** Kevin Curtis is working on design. We need to know the length of the trench and location. The width is 12 ft. with a 3 ft. walkway.
- Item 3:** Air re-circulation duct work was not installed last year.
- Status:** Duct work will be installed this year.

LAB VAN

Item 1: Constant temperature is required.

Status: So far we haven't located a variable output, constant operation heater. Jay K. has developed a possible solution which will be discussed.

Item 2: Improved water distribution and an additional wash station is required.

Status: A new rinse station is planned. Water distribution requirements must be discussed with SMO.

VEHICLES AND FACILITIES

Item 1: Additional snow machines are required.

Status: PICO is receiving bids on 4 new Cheyenne machines.

Item 2: A new Cat 931 is required.

Status: A quote from Caterpillar has been received and a P.O. is being processed. The 931 is scheduled for delivery by April 1, 1991.

Item 3: We need new guidelines for use of the Telex.

Status: New guidelines have not been established.

Item 4: GISP2 BX to be established.

Status: No action has been taken. Would the SMO provide a list of what they would like included?

Item 5: More radios are required.

Status: 5 new base stations, 2 new hand-helds and 5 intercom units have been ordered. An ICOM 700 has also been ordered for ATM.

Item 6: New plumbing in the bath house must be installed.

Status: Materials list has been completed and will be ordered.

Item 7: Lack of office supplies.

Status: Office supplies will be coordinated with the SMO and purchased by PICO.

ICE TRANSPORT TO CONUS

Item 1: New core storage containers are required for shipment of core to CONUS.

Status: Two options are being investigated:

a) Insulated boxes which could be knocked-down and returned to the field inexpensively.

b) Portable freezer units which fit on Air Force pallets.

PICO STAFF

Item 1: Lack of camp personnel to open camp.

Status: See attached sheet for list of planned camp personnel and phase-up plan.

Item 2: Defining the requirements of a camp medic.

Status: See attached job description for medic.

LIST OF
POTENTIAL
CONTAMINANTS

SDS NUMBER: 258

Balancing putty - D.C. motor

MSDS NUMBER: 258
 PRODUCT: EPO DYNWEIGHT
 CODE: EP
 MFG NAME: COMMERCIAL CHEMICAL COMPANY.
 CITY: CINCINNATI
 STATE: OH
 ADDRESS: 1021 SUMMER ST.
 ADDRESS:
 ZIP: 45204
 EMERGENCY PHONE: 513-921-8622
 513-921-8600
 CHEMICAL: NONE ON MSDS
 TRADE NAME: EPO DYNWEIGHT
 CHEMICAL FAMILY: NONE LISTED ON MSDS
 FORMULA: NONE LISTED ON MSDS
 MIXTURE: NO HAZARDOUS INGREDIENTS PER OSHA
 1910.1000
 VAPOR PRESSURE: N. I. F.
 VOLATILE %: N/I
 EVAPORATION: N/I
 APPEARANCE: GREY MASTIC ODOR. AMMONIA TYPE.
 SPECIFIC GRAVITY: 2.039
 FLASH POINT: 200F
 FLAMMABLE LIMITS: N/I
 FLAME LEL: N/I
 FLAME UEL: N/I
 EXTINGUISH: DRY CHEMICAL, CO2 FOAM-FOG
 FIRE PROCEDURE: FIREFIGHTERS SHOULD WEAR SELF-CONTAINED
 BREATHING APPARATUS TO AVOID
 INHALATION OF SMOKE VAZPORS.
 EXPLOSION HAZARD: NONE KNOWN
 THRESHOLD: N/I
 EXPOSURE: ACUTE: DERMATITUS CHRONIC: E
 IRRITANT. HIGHLY IRRITATING
 TO EYES. DEFATTING TO SKIN. RATED
 SLIGHT SKIN IRRITANT. MAY BE
 SKIN SENSITIZER.
 FIRST AID: INHALATION: REMOVE TO FRESH AIR
 EYES: FLUSH WITH WATER. MEDICAL
 ATTENTION AS REQUIRED.
 SKIN: WASH WITH SOAP AND WATER.
 INGESTION: CONTACT PHYSICIAN.
 STABILITY: STABLE
 DECOMPOSITION: SMOKE, TOXIC VAPORS, FUMES.
 POLYMERIZATION: WILL NOT OCCUR
 LEAK STEPS: PICK UP AND DISCARD APPROPRIATELY
 KEEP AWAY FROM HEAT OR OPEN FLAME
 DISPOSAL: BURN IN ADEQUATE INCINERATOR OR
 APPROVED LANDFILL.
 RESPIRATORY: N. I. F.
 VENTILATION: N/I
 LOCAL EXHAUST: RECOMMENDED
 OTHER EXHAUST: N/I
 GLOVES: RECOMMENDED
 EYE PROTECTION: RECOMMENDED
 OTHER PROTECTION: UNCONTROLLED EXOTHERMIC REACTION

OCT-23-90 TUE 11:35 IND DRIVE

MSDS NUMBER: 250

OTHER PRECAUTIONS:.. CLEAN HYGIENE HABITS. CLELAN. DAILY.
AVOID CONDITIONS:....
AVOID MATERIAL:..... STRONG OXIDIZING AGENTS. AM...
UNDER UNCONTROLLED
CONDITIONS.
SPECIAL EXHAUST:..... N/I
MECHANICAL EXHAUST:.. N/I
BOILING POINT:..... NONE
DATE ADDED:..... 09 FEB 87
VAPOR DENSITY:..... N/A
SOLUBILITY:..... INSOLUBLE

CHEMICAL NAME AND NO

EPO DYNAM

2	FIRE HAZARD
1	HEALTH HAZARD
1	REACTIVE See MSDS

PERSONAL PROTECTION
Safety Glasses
Impervious Clothing

TARGET ORGAN

NONE

Indicated

Materials List - TT-293X Motor

1. Armature:

- . Shaft: C1144 Stressproof Steel
- . Laminations: AISI Electrical Sheet Steel
- . Slot insulation: Dupont 2-2-2 Nomex-Mylar-Nomex
- . Winding Wire: Phelps Dodge HAPTZ or Essex GP-2000
200°C Wire
- . Commutator: Copper Bar, Sub-Surface Mica and
Steel Hub
- . Solder: Multi-Core, 95A, 180°C
- . Winding Wedges: Glass-Filled Polyester Rod
- . Varnish: Schnectady Isonel 31 Polyester

2. Stator

- . Laminations: Cold Rolled Steel
- . Cast Aluminum Housing:
 - A413.1 Alloy Ingot
 - 150.1 Pure Aluminum Ingot
- . Magnets: NdFeB Material
- . Magnet Adhesive: Loctite #325 Adhesive and
#707 Activator

3. Endbells: Cast Aluminum, M 1000 Alloy

- . Bearing Liner: Gray Cast Iron
- . Brush Holders, Morganite, Inc.
 - Brass Insert
 - GE Valox 420 Insulator
- . Lead/Hookup Wires: Stranded Conductors
Teflon Type EE 200°C Insulation
- . Shrink Tubing: Polyolefin

4. Bearings: Sealed ABEC 1 Ball Bearings
Chevron SRI #2 Lube.

5. Motor Brushes

- . Helwig Carbon Co. Grade E-27
Milwaukee, WI
Telephone: 414-453-9389
- . or Morganite, Inc. Grade E-251
Dunn, NC
Telephone: 919-892-8081

6. Other Metals

- . Zinc Plated Steel Screws and Bolts
- . Zinc Plated Steel Washers
- . Spring Steel
- . Zinc Plated Terminals

TEXACO
INDUSTRIAL HYGIENE, TOXICOLOGY, AND MATERIAL
SAFETY DATA SHEET



NOTE: NO REPRESENTATION IS MADE AS TO THE ACCURACY OF THE INFORMATION
HEREIN. SEE PAGE 7 FOR CONDITIONS UNDER WHICH DATA ARE FURNISHED.

Trade Name and Synonyms 00600 TRANSFORMER OIL	
Manufacturer's Name Texaco	Emergency Telephone No. (914) 831-3400
Address P.O. Box 509 Beacon, NY 12508	
Chemical Name and/or Family or Description Transformer Oils	
THIS PRODUCT IS CLASSIFIED AS: <input type="checkbox"/> CARCINOGENIC BY OSHA, IARC, OR NTP <input checked="" type="checkbox"/> NOT CARCINOGENIC	
WARNING STATEMENT: CAUTION! LOW VISCOSITY PETROLEUM MIXTURE CAN CAUSE LUNG INJURY IF INGESTED AND ASPIRATED	
OCCUPATIONAL CONTROL PROCEDURES	
Protective Equipment (Type)	
Eyes:	Chemical type goggles or face shield optional.
Skin:	Exposed employes should exercise reasonable personal cleanliness; this includes cleansing exposed skin areas several times daily with soap and water, and laundering or dry cleaning soiled work clothing at least weekly.
Inhalation:	If vapor, mist or dust is generated in excess of permissible concentrations (see pg.4) use respirator approved by MSHA or NIOSH.
Ventilation:	Adequate to meet component permissible concentrations.
Permissible Concentrations:	
Air:	None established for product. 5 mg/m ³ for mineral oil mist averaged over an 8 hour daily exposure (OSHA PEL, ACGIH TLV-TWA).
EMERGENCY AND FIRST AID PROCEDURES	
First Aid	
Eyes:	As with most foreign materials, should eye contact occur, flush eyes with plenty of water.
Skin:	Wash exposed areas with soap and water.
Ingestion:	Do NOT induce vomiting. Aspiration of the fluid can cause serious lung injury, i.e. chemical pneumonitis. CALL A DOCTOR IMMEDIATELY.
Inhalation:	If irritation or drowsiness occurs, remove to fresh air.
Other Instructions:	None.



PHYSIOLOGICAL EFFECTS:		Code No.
		00600
Effects of Exposure		
Acute:		
Eyes:	Believed to be minimally irritating.	
Skin:	Believed to be minimally irritating.	
Respiratory System:	Vapors or mist in excess of permissible concentrations (pg4) may cause irritation (nose/throat), headache, nausea, and drowsiness.	
Chronic:	N.D.	
Other:	-	
Sensitization Properties:		
Skin: Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input checked="" type="checkbox"/>	Respiratory: Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input checked="" type="checkbox"/>	
Median Lethal Dose (LD ₅₀ LC ₅₀) (Species)		
Oral	Believed to be >5 g/kg (rat); practically non-toxic	
Inhalation	N.D.	
Dermal	Believed to be >10 g/kg (rabbit); practically non-toxic	
Other	N. D.	
Irritation Index, Estimation of Irritation (Species)		
Skin	Believed to be 0-0.5/8.0; no appreciable effect	
Eyes	Believed to be 0-15/110; no appreciable effect	
Symptoms of Exposure <u>None expected other than possible minimal irritation.</u>		
FIRE PROTECTION INFORMATION		
Ignition Temp. °F. <u>N.D.</u>	Flash Point °F. (Method) <u>295° F (COC)</u>	
Flammable Limits (%) Lower <u>N.D.</u>	Upper <u>N.D.</u>	
Products Evolved When Subjected to Heat or Combustion: Carbon monoxide, carbon dioxide, aldehydes and ketones, combustion products of nitrogen and sulfur.		
Recommended Fire Extinguishing Agents And Special Procedures: According to the National Fire Protection Association Guide, use water spray, dry chemical, foam, or carbon dioxide. Water or foam may cause frothing. Use water to cool fire-exposed containers. If a leak or spill has not ignited, use water spray to disperse the vapors and to provide protection for persons attempting to stop the leak.		
Unusual or Explosive Hazards: None.		

**ENVIRONMENTAL PROTECTION**

Code No. 00600

Waste Disposal Method:

Under RCRA, it is the responsibility of the user of products to determine, at the time of disposal, whether product meets RCRA criteria for hazardous waste. This is because product uses transformations, mixture, processes, etc. may render the resulting material hazardous. (See Remarks for Waste Classification.)

Procedures in Case of Breakage or Leakage:

(Transportation Spills Call CHEMTREC (800) 424-9300)
Contain spill if possible. Wipe up or absorb on suitable material and shovel up.

Remarks:

Waste Classification: Product has been evaluated for RCRA characteristics and does not meet criteria of a hazardous waste if discarded in its purchased form.

PRECAUTIONS

CAUTION! LOW VISCOSITY PETROLEUM MIXTURE
CAN CAUSE LUNG INJURY IF INGESTED
AND ASPIRATED

Requirements for Transportation, Handling and Storage:

Minimum feasible handling temperatures should be maintained. Periods of exposure to high temperatures should be minimized. Water contamination should be avoided.

DOT Proper Shipping Name: N.A.

DOT Hazard Class (if applicable): N.A.

CHEMICAL AND PHYSICAL PROPERTIESBoiling Point (°F) N.D. Vapor Pressure N.D. (mmHg)Specific Gravity 0.889 (H₂O=1) Vapor Density N.D. (Air=1)Appearance and Odor Clear and bright liquidpH of undiluted product N.A.Solubility N.D.Percent Volatile by Volume N.D.Evaporation N.D. ()=1Viscosity 12.0 cSt @40COther -Hazardous Polymerizations _____ Occur X Do not occur

The Material Reacts Violently With: (If others is checked below, see additional comments on page 6 for further details)

Air _____ Water _____ Heat _____ Strong Oxidizers X Others _____ None of These _____

N.D. - Not Determined N.A. - Not Applicable

< - Less Than > - Greater Than

**COMPOSITION**

Code No. 00600

Chemical/Common Name	CAS No.	Exposure Limit	Range in %
*Hydrotreated light naphthenic petroleum distillate	64742536	5mg/m3 ACGIH (MIST) 5mg/m3 OSHA (MIST) 10mg/m3 STEL (MIST)	95.00 - 99.99

*Hazardous according to OSHA (1910.1200) or one or more state Right-To-Know lists.

SARA TITLE III

I. Title III Section 302/304 Extremely Hazardous Substance

Component	CAS No.	%	RQ (Lbs)	TPQ (Lbs)
NONE				

II. CERCLA Section 102(a) Hazardous Substance

Component	CAS No.	%	RQ (Lbs)
NONE			

III. Title III Section 311 Hazard Categorization

Acute	Chronic	Fire	Pressure	Reactive	Not Applicable
					X

IV. Title III Section 313 Toxic Chemicals

Component	CAS No.	%
NONE		



PRODUCT SHIPPING LABEL

Code
No. 00600

00600 TRANSFORMER OIL

CAUTION! LOW VISCOSITY PETROLEUM MIXTURE
CAN CAUSE LUNG INJURY IF INGESTED
AND ASPIRATED

If swallowed, DO NOT induce vomiting.
Call a doctor immediately.

Chemical/Common Name	CAS No.	Range in %
*Hydrotreated light naphthenic petroleum dis- tillate	64742536	95.00 - 99.99

*Hazardous according to OSHA (1910.1200) or one or more state Right-To-Know lists.
Not classified as a hazardous material by DOT definition.

HMIS
 Health : 0 Reactivity : 0
 Flammability: 1 Special : -

CAUTION: Misuse of empty containers can be hazardous. Empty containers can be hazardous if used to store toxic, flammable, or reactive materials. Cutting or welding of empty containers might cause fire, explosion or toxic fumes from residues. Do not pressurize or expose to open flame or heat. Keep container closed and drum bungs in place.

HEALTH EMERGENCY TELEPHONE: (914) 831-3400

Texaco
2000 Westchester Avenue
White Plains, New York 10650

For Additional Technical Information Concerning:
Fuels: (914) 838-7336
Lubricants/Antifreezes: (914) 838-7509
Chemicals: (512) 459-6543

Transportation Spills:
CHEMTREC (800) 424-9300

TEXACO
 INDUSTRIAL HYGIENE, TOXICOLOGY, AND MATERIAL
 SAFETY DATA SHEET



NOTE: NO REPRESENTATION IS MADE AS TO THE ACCURACY OF THE INFORMATION
 HEREIN. SEE PAGE 7 FOR CONDITIONS UNDER WHICH DATA ARE FURNISHED.

Trade Name and Synonyms 01537 AIRCRAFT HYDRAULIC OIL 15	
Manufacturer's Name Texaco	Emergency Telephone No. (914) 831-3400
Address P.O. Box 509 Beacon, NY 12508	
Chemical Name and/or Family or Description Hydraulic Oils	
THIS PRODUCT IS CLASSIFIED AS: <input type="checkbox"/> CARCINOGENIC BY OSHA, IARC, OR NTP <input checked="" type="checkbox"/> NOT CARCINOGENIC	
WARNING STATEMENT: CAUTION! COMBUSTIBLE LOW VISCOSITY PETROLEUM MIXTURE CAN CAUSE LUNG INJURY IF INGESTED AND ASPIRATED	
OCCUPATIONAL CONTROL PROCEDURES	
Protective Equipment (Type)	
Eyes:	Chemical type goggles or face shield optional.
Skin:	Protective clothing such as uniforms, coveralls or lab coats should be worn. Launder or dry clean when soiled. Destroy contaminated shoes. (See additional comments, p.6) Gloves resistant to chemicals and petroleum distillates required.
Inhalation:	If vapor, mist or dust is generated in excess of permissible concentrations (see pg.4) use respirator approved by MSHA or NIOSH.
Ventilation:	Adequate to meet component permissible concentrations.
Permissible Concentrations:	
Air:	None established for product; refer to page 4 for component permissible concentrations.
EMERGENCY AND FIRST AID PROCEDURES	
First Aid	
Eyes:	As with most foreign materials, should eye contact occur, flush eyes with plenty of water.
Skin:	Wash exposed areas with soap and water.
Ingestion:	Do NOT induce vomiting. Aspiration may cause chemical pneumonia.
Inhalation:	If irritation or drowsiness occurs, remove to fresh air.
Other Instructions:	None.

**PHYSIOLOGICAL EFFECTS:**Code
No. 01537

Effects of Exposure

Acute:

Eyes: Believed to be minimally irritating.

Skin: Believed to be minimally irritating. May cause dermatitis on prolonged or repeated contact.

Respiratory System: Vapors or mist in excess of permissible concentrations (pg4) may cause irritation (nose/throat), headache, nausea, and drowsiness.

Chronic: N.D.

Other: -

Sensitization Properties:

Skin: Yes No Unknown Respiratory: Yes No Unknown Median Lethal Dose (LD₅₀ LC₅₀) (Species)Oral Believed to be > 5 g/kg (rat); practically non-toxicInhalation N.D.Dermal Believed to be > 3 g/kg (rabbit); practically non-toxicOther N. D.

Irritation Index, Estimation of Irritation (Species)

Skin Believed to be < 0.5/8.0 (rabbit); no appreciable effectEyes Believed to be < 15/110 (rabbit); no appreciable effectSymptoms of Exposure None expected other than possible minimal irritation**FIRE PROTECTION INFORMATION**Ignition Temp. °F. N.D. Flash Point °F. (Method) 180° F PMCCFlammable Limits (%) Lower N.D. Upper N.D.Products Evolved When Subjected to Heat or Combustion:
Carbon monoxide, carbon dioxide, aldehydes and ketones, combustion products of phosphorus.

Recommended Fire Extinguishing Agents And Special Procedures:

According to the National Fire Protection Association Guide, use water spray, dry chemical, foam, or carbon dioxide.

Water or foam may cause frothing. Use water to cool fire-exposed containers. If a leak or spill has not ignited, use water spray to disperse the vapors and to provide protection for persons attempting to stop the leak.

Unusual or Explosive Hazards:

None.

N.D. - Not Determined N.A. - Not Applicable

< - Less Than > - Greater Than

**ENVIRONMENTAL PROTECTION**Code
No. 01537

Waste Disposal Method:

Under RCRA, it is the responsibility of the user of products to determine, at the time of disposal, whether product meets RCRA criteria for hazardous waste. This is because product uses, transformations, mixture, processes, etc. may render the resulting material hazardous. (See Remarks for Waste Classification.)

Procedures in Case of Breakage or Leakage: (Transportation Spills Call CHEMTREC (800) 424-9300)
Contain spill if possible. Wipe up or absorb on suitable material and shovel up.

Remarks:

Waste Classification: Product has been evaluated for RCRA characteristics and does not meet criteria of a hazardous waste if discarded in its purchased form.

PRECAUTIONS

CAUTION! COMBUSTIBLE
LOW VISCOSITY PETROLEUM MIXTURE
CAN CAUSE LUNG INJURY IF INGESTED
AND ASPIRATED
Keep away from heat and flame.

Requirements for Transportation, Handling and Storage:

Minimum feasible handling temperatures should be maintained. Periods of exposure to high temperatures should be minimized. Water contamination should be avoided.

DOT Proper Shipping Name: Combustible liquid, n.o.s.

DOT Hazard Class (if applicable): Combustible liquid NA1993

CHEMICAL AND PHYSICAL PROPERTIESBoiling Point (°F) >400 Vapor Pressure N.D. (mmHg)Specific Gravity 0.8729 (H₂O=1) Vapor Density N.D. (Air=1)Appearance and Odor Red liquidpH of undiluted product N.A.Solubility N.D.Percent Volatile by Volume N.D.Evaporation N.D. ()=1Viscosity 13.2 cSt @ 40°COther -Hazardous Polymerizations Occur X Do not occur

The Material Reacts Violently With: (if others is checked below, see additional comments on page 6 for further details)

Air	Water	Heat	Strong Oxidizers	Others	None of These
			X		



COMPOSITION	Code No. 01537
--------------------	----------------

Chemical/Common Name	CAS No.	Exposure Limit	Range in %
*2,6-di-tert-butyl-4-methylphenol	128370	10mg/m3 TWA ACGIH 10mg/m3 TWA OSHA	1.00 - 2.99
Solvent refined hydrotreated middle distillate	64742467	5mg/m3 ACGIH (MIST) 5mg/m3 OSHA (MIST) 10mg/m3 STEL (MIST)	80.00 - 94.99
Methacrylic acid, copolymer of "methyl" and "lauryl" esters	30795643	None Established	4.00 - 10.99

*Hazardous according to OSHA (1910.1200) or one or more state Right-To-Know lists.

SARA TITLE III

I. Title III Section 302/304 Extremely Hazardous Substance						
Component	CAS No.	%	RQ (Lbs)	TPQ (Lbs)		
NONE						
II. CERCLA Section 102(a) Hazardous Substance						
Component	CAS No.	%	RQ (Lbs)			
Methyl methacrylate	80626	0.01-0.09	1000			
III. Title III Section 311 Hazard Categorization						
Acute	Chronic	Fire X	Pressure	Reactive	Not Applicable	
IV. Title III Section 313 Toxic Chemicals						
Component	CAS No.	%				
NONE						



PRODUCT SHIPPING LABEL

Code No. 01537

01537 AIRCRAFT HYDRALLIC O L 15

CAUTION! COMBUSTIBLE
LOW VISCOSITY PETROLEUM MIXTURE
CAN CAUSE LUNG INJURY IF INGESTED
AND ASPIRATED

Keep away from heat and flame.

If swallowed, DO NOT induce vomiting.
Call a doctor immediately.
In case of fire use water spray, foam, dry chemical or CO2.

Chemical/Common Name	CAS No.	Range in %
*2,6-di-tert-butyl-4-methylphenol	128370	1.00 - 3.99
Solvent refined hydrotreated middle distillate	64742467	80.00 - 94.99
Methacrylic acid, copolymer of "methyl" and "lauryl" esters	30795643	4.00 - 10.99

*Hazardous according to OSHA (1910.1200) or one or more state Right-To-Know lists.

HMIS
 Health : 0 Reactivity : 0
 Flammability: 2 Special : -

DOT Proper Shipping Name: Combustible liquid, n.o.s.
DOT Hazardous Class : Combustible liquid NA1993

CAUTION: Misuse of empty containers can be hazardous. Empty containers can be hazardous if used to store toxic, flammable, or reactive materials. Cutting or welding of empty containers might cause fire, explosion or toxic fumes from residues. Do not pressurize or expose to open flame or heat. Keep container closed and drum bungs in place.

HEALTH EMERGENCY TELEPHONE: (914) 831-3400

Texaco
2000 Westchester Avenue
White Plains, New York 10650

For Additional Technical Information Concerning:
Fuels: (914) 838-7336
Lubricants/Antifreezes: (914) 838-7509
Chemicals: (512) 459-6543

Transportation Spills:
CHEMTREC (800) 424-9300

CRREL SCHEDULE

DRILLING

CRREL drill component test. See attachment.

Problems involving rust forming on the drill will be addressed by using a Chevron rust preventative. 10 gallons of this preventative are at the GISP2 site and will be applied after each drill component is dried thoroughly. The components will then be placed in polyethylene lay flat tubing to prevent moisture from condensing on the drill components during shipment to CONUS.

A list of potential contaminants is assembled and will be distributed. See attachment.

Butyl acetate samples from various engineering tests will be made available to the SMO for analysis. What size samples are needed and how many are required?

Anti-torque designs. See attachment.

Cutters. See attachment

Borehole camera and fishing tools. See attachment.

Pump section. Teflon stators have been ordered.

Vibrators. Variable frequency variable amplitude vibrators have been located and will be purchased. They will probably not be available for the CRREL test but will be tested before the field season.

Core handling. Mark is preparing drawings and concept paper.

Drill cable will be used for measuring depth of hole. A 100 meter tape measure will also be used if a butyl proof version can be found.

HNU. Tom Gosink

Butyl test schedule is being developed.

Mark is investigating insulated shipping containers for core transport.

Schedule Name :
 Responsible :
 As-of Date : 29-Nov-90 Schedule File : C:\TL3\DATA\DRILL91

Task Name	Duratn (Days)	Start Date	End Date	90 Nov 1	Dec 1	91 Jan 2	Feb 1	Mar 1	Apr 1	May 1
DESIGNS	243.3	16-Nov-90	2-Dec-91	#####						
Tilt Table	39.9	16-Nov-90	31-Dec-90	XXXXXXXXXXXXXX						
300 Meter System	18.4	3-Jan-91	1-Feb-91			.XXXXXX				
Grootes Camp and Drill	243.3	16-Nov-90	2-Dec-91	XX						
Thermal Mechanical Drill	133	16-Nov-90	3-Jun-91	XX						
Rock Drill	150.5	16-Nov-90	1-Jul-91	XX						
TESTS	56	26-Nov-90	11-Feb-91	#####						
Alcohol	7	26-Nov-90	3-Dec-90	XXX						
Cortland Cable Tensile Test	7	4-Dec-90	11-Dec-90	XXX						
Longevity Test on Gear Reducer	7	12-Dec-90	19-Dec-90	XXXX						
Composite Core Barrel Tensile	7	20-Dec-90	27-Dec-90	XXX						
Anti-Torque Test	7	28-Dec-90	7-Jan-91	XXX						
Drill Head Test	7	8-Jan-91	17-Jan-91	.XXXX						
Pump & Screen Test	7	18-Jan-91	30-Jan-91	XXX						
Water Jet Cutting Test	7	31-Jan-91	11-Feb-91	XXX						
FABRICATION	98	1-Nov-90	15-Mar-91	#####						
Tilt Table	44.6	2-Jan-91	15-Mar-91			XXXXXXXXXXXXXXXXXX				
Couplings	62.1	1-Nov-90	15-Jan-91	XXXXXXXXXXXXXXXXXXXX						
Drill Heads	62.1	1-Nov-90	15-Jan-91	XXXXXXXXXXXXXXXXXXXX						
Screen Sections	4.5	29-Nov-90	4-Dec-90	XX-----						
Anti-Torque Section	37.2	29-Nov-90	15-Jan-91	XXXXXXXXXXXX						
Instrumentation	4.5	29-Nov-90	4-Dec-90	XX-----						
DELIVERABLE REPORTS	75.4	16-Nov-90	1-Mar-91	#####						
Alcohol Drill Fluid	7	29-Nov-90	7-Dec-90	XXX-----						
Rinaldi Report	7	29-Nov-90	7-Dec-90	XXX-----						
Drill Status	11.5	16-Nov-90	29-Nov-90	XXXXX						
Carousel Report	29.4	29-Nov-90	2-Jan-91	XXXXXXXXXXXX						
4 in Drill Manual	70.9	22-Nov-90	1-Mar-91	XXXXXXXXXXXXXXXXXXXX						
DRAWINGS	241.5	18-Nov-90	2-Dec-91	#####						
4 in Drill Manual Drawings	74.4	18-Nov-90	1-Mar-91	XXXXXXXXXXXXXXXXXXXX						
Wet Drill Update	82.7	29-Nov-90	1-Apr-91	XXXXXXXXXXXXXXXXXXXX						
300 meter Winch	4.5	29-Nov-90	4-Dec-90	XX-----						
Grootes Drill Concept	231.5	29-Nov-90	2-Dec-91	XXXXXXXXXXXXXXXXXXXX						

Tilt Table	4.5	29-Nov-90	4-Dec-90	XX-----				
General Update	177.3	29-Nov-90	3-Sep-91	XX				
SHOP	32.4	26-Nov-90	2-Jan-91	#####	.	.	.	.
Purchases and Setup	32.4	26-Nov-90	2-Jan-91	XXXXXXXXXXXXX	.	.	.	.
Layout	4.5	29-Nov-90	4-Dec-90	XX-----	.	.	.	.
INVENTORY	72.6	1-Nov-90	1-Feb-91	#####	.	.	.	.
Identify Drill Parts-Salvage	44.6	12-Nov-90	2-Jan-91	XXXXXXXXXXXXX	.	.	.	.
Pallet Racks	47.7	29-Nov-90	1-Feb-91	XXXXXXXXXXXXXXXXXXXX	.	.	.	.
U. Park Storage	4.5	19-Nov-90	24-Nov-90	XX	.	.	.	.
Forklift	47.7	1-Nov-90	25-Dec-90	XXXXXXXXXXXXXXXXXXXX	.	.	.	.

```

-----
XXXXX Detail Task      #### Summary Task      M Milestone
xxxxx (Started)      ==### (Started)      >>> Conflict
XXX-- (Slack)        ##-- (Slack)        ..XXX Resource delay
----- Scale: 3 days per character -----

```

TIME LINE Gantt Chart Report, Strip 1

Schedule Name :
 Responsible :
 As-of Date : 30-Nov-90

Task Name	Duratn (Days)	Start Date	End Date	90 Nov 1	Dec 1	91 Jan 2	Feb 1	Mar 1	Apr 1	May 1
TEST SCHEDULE	55.1	1-Dec-90	15-Feb-91		#####					
Test Existing Head	20.1	15-Jan-91	15-Feb-91		|	. #####				
Power Requirements	20.1	15-Jan-91	15-Feb-91		|	. XXXXXXXX				
Penetration Rates	20.1	15-Jan-91	15-Feb-91		|	. XXXXXXXX				
Torque Loads	20.1	15-Jan-91	15-Feb-91		|	. XXXXXXXX				
Core Dogs	20.1	15-Jan-91	15-Feb-91		|	. XXXXXXXX				
Chip Path, Surface Finish	20.1	15-Jan-91	15-Feb-91		|	. XXXXXXXX				
Pre-Cutter Head	20.1	15-Jan-91	15-Feb-91		|	. #####				
Power Requirements	20.1	15-Jan-91	15-Feb-91		|	. XXXXXXXX				
Penetration Rates	20.1	15-Jan-91	15-Feb-91		|	. XXXXXXXX				
Torque Loads	20.1	15-Jan-91	15-Feb-91		|	. XXXXXXXX				
Core Dogs	20.1	15-Jan-91	15-Feb-91		|	. XXXXXXXX				
Chip Path, Surface Finish	20.1	15-Jan-91	15-Feb-91		|	. XXXXXXXX				
Anti-Torque Test	35.9	1-Dec-90	15-Jan-91		#####	-----				
Test Free Vertical Movement	35.9	1-Dec-90	15-Jan-91		XXXXXXXXXXXXX					
Torque Holding Ability	35.9	1-Dec-90	15-Jan-91		XXXXXXXXXXXXX					
Coupling	28	2-Jan-91	15-Feb-91		|	#####				
Handling	28	2-Jan-91	15-Feb-91		|	XXXXXXXXXXXXX				
Chip Path - Emptying	28	2-Jan-91	15-Feb-91		|	XXXXXXXXXXXXX				
Rigidity	28	2-Jan-91	15-Feb-91		|	XXXXXXXXXXXXX				
Vibrator	55.1	1-Dec-90	15-Feb-91		#####					
Transport Effectiveness	55.1	1-Dec-90	15-Feb-91		XXXXXXXXXXXXXXXXXXXXX					
Drill Stabilizers	55.1	1-Dec-90	15-Feb-91		XXXXXXXXXXXXXXXXXXXXX					

 XXXXX Detail Task #### Summary Task M Milestone
 xxxxx (Started) ==### (Started) >>> Conflict
 xxx-- (Slack) ###-- (Slack) ..XXX Resource delay
 ----- Scale: 3 days per character -----

TIME LINE Gantt Chart Report, Strip 1



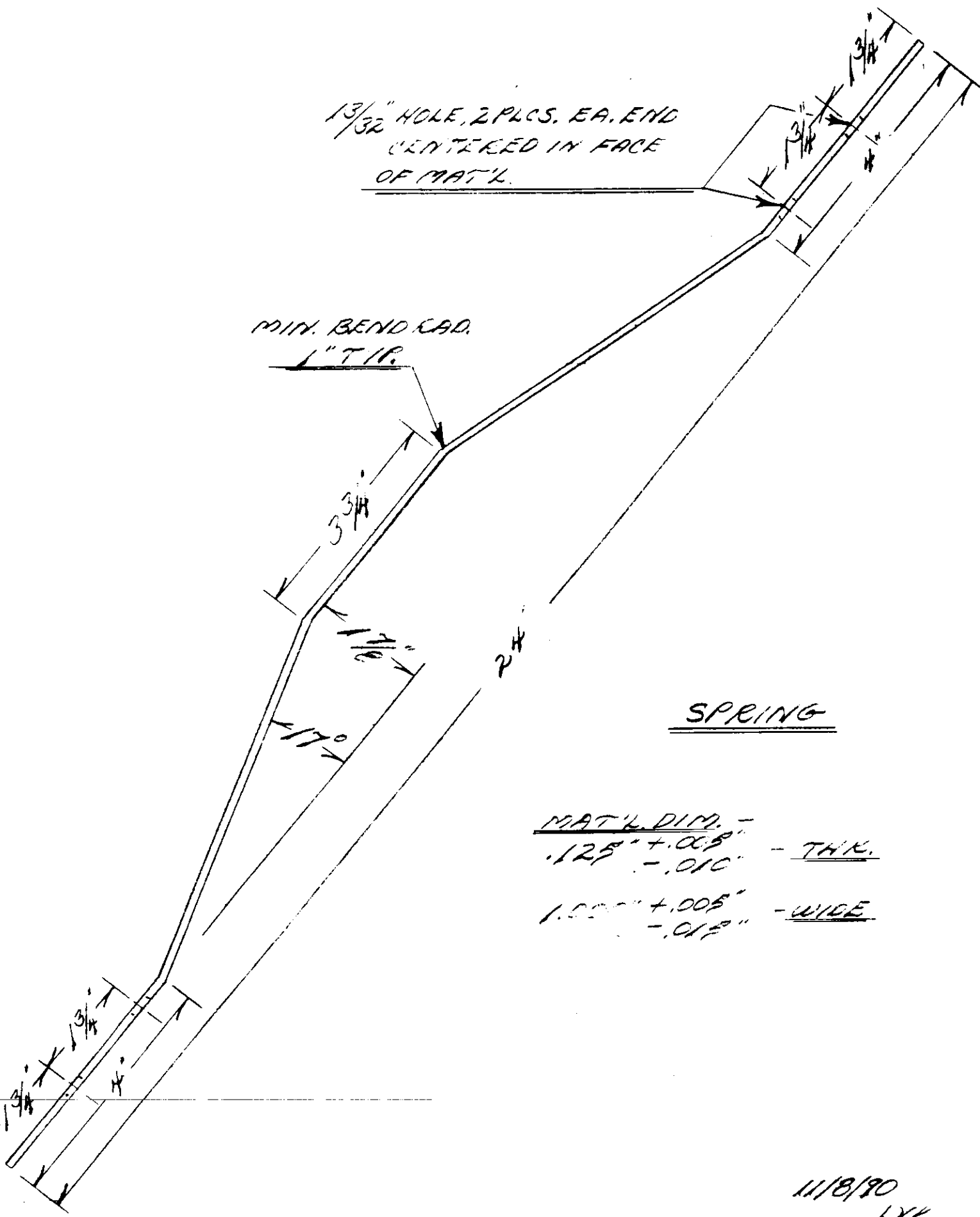
ANTI-TORQUE DESIGNS

13/32" HOLE, 2 PLCS. EA. END
CENTERED IN FACE
OF MAT'L.

MIN. BEND RAD.
1" T.I.P.

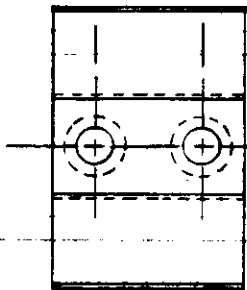
SPRING

MAT'L DIM. -
.125" +.005" - THK.
.010" - .010" -
1.000" +.005" - WIDE
.015" - .015" -

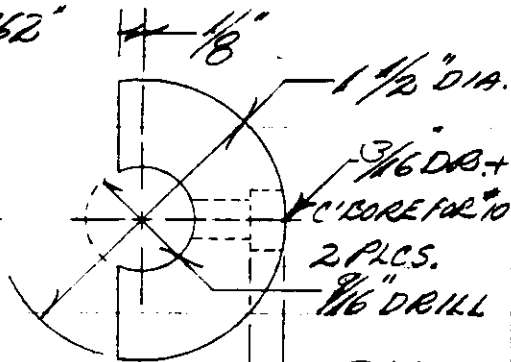


11/18/90
LYK

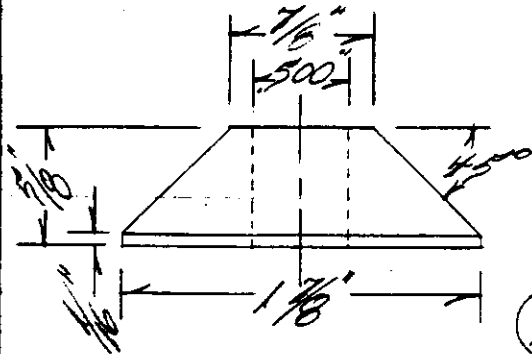
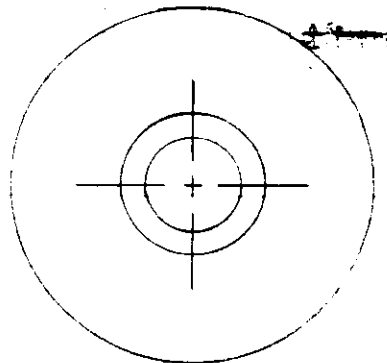
2.19" 562"



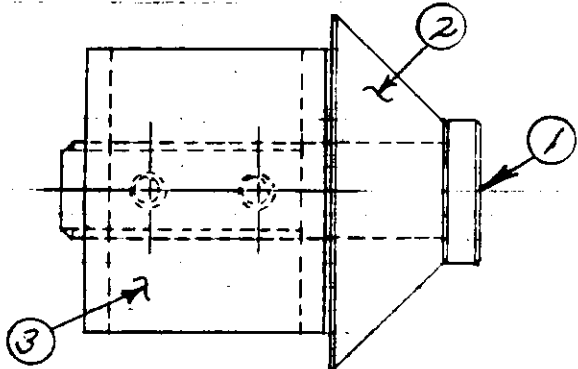
1.00"



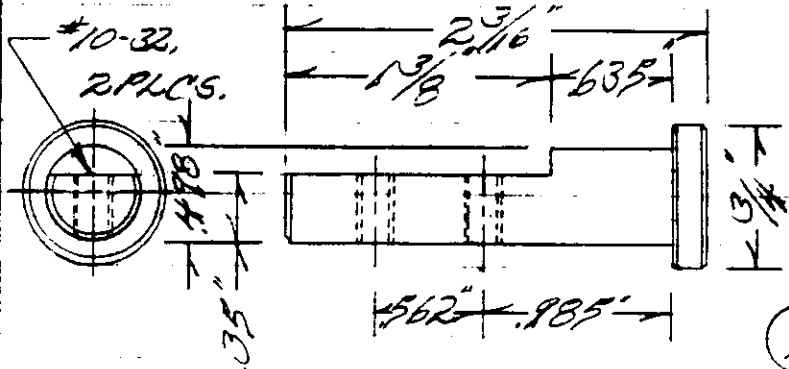
1 1/2" DIA.
3/16" DIA. +
CORE FOR #10
2 PLCS.
1/16" DRILL
3/16"
CLAMP



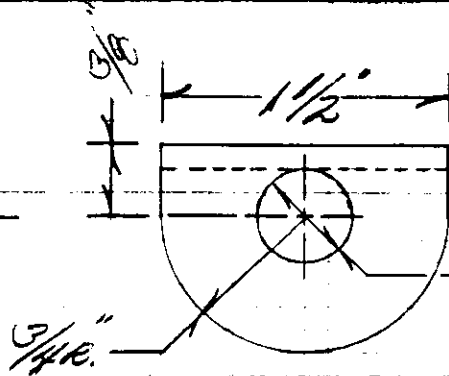
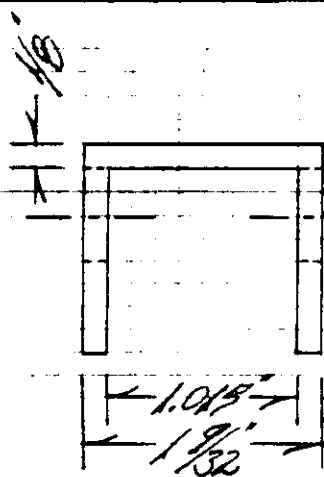
2



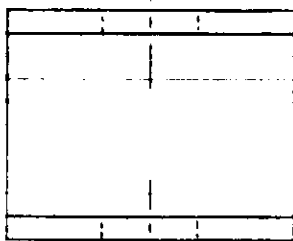
3

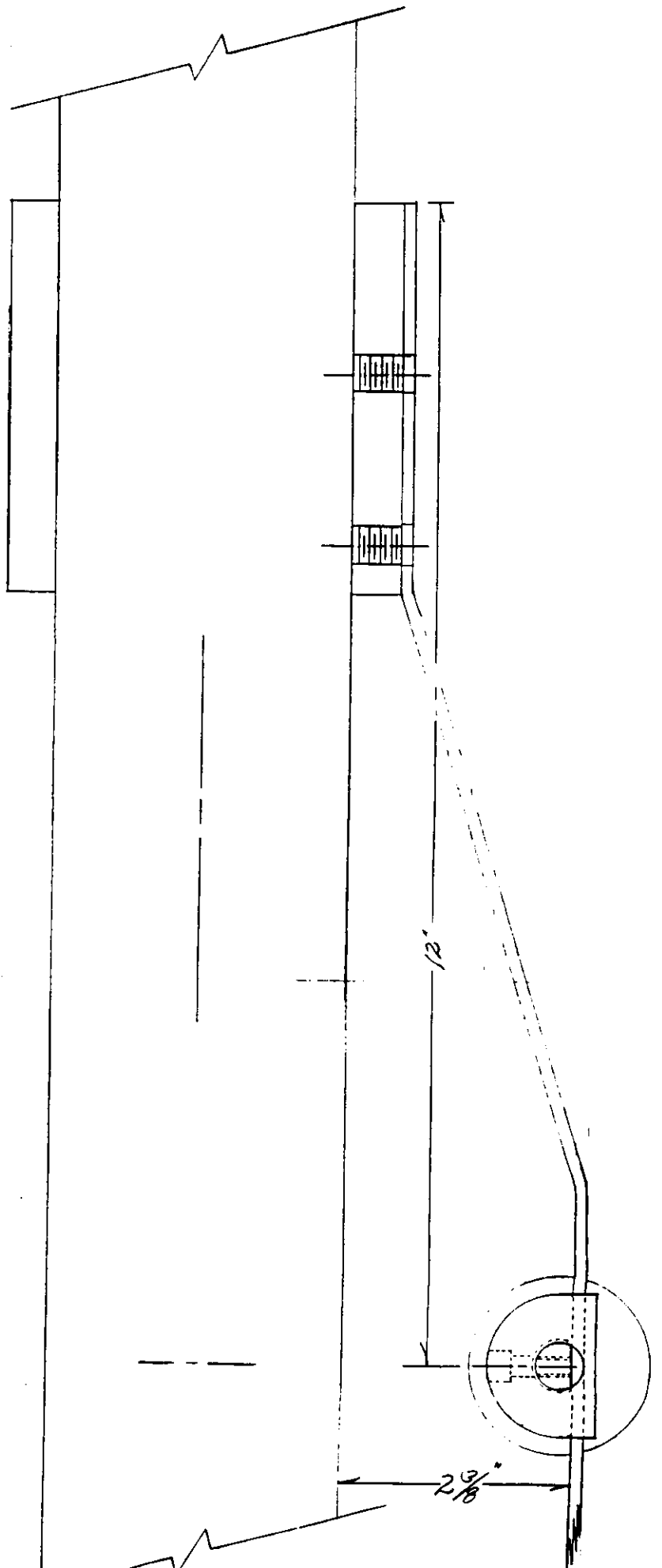


1



3





RETRIEVAL
TOOL SAMPLES

RETRIEVAL TOOLS

A number of retrieval tools are being examined. Retrieval magnets with 155 pounds of force have been ordered. Also a retrieval magnet attachment will be made for an outer core barrel utilizing the rare earth magnets that were salvaged from the failed DC drill motor. This will allow us to retrieve any ferrous metal objects that may find themselves down hole.

For dealing with any non-ferrous metal objects that may be present, we will have two options. One will be a spoon auger that will replace the core barrel assembly. It will be lowered to the bottom of the borehole and then rotated to scoop up debris off the bottom. This would also be effective for removing non-metallic debris.

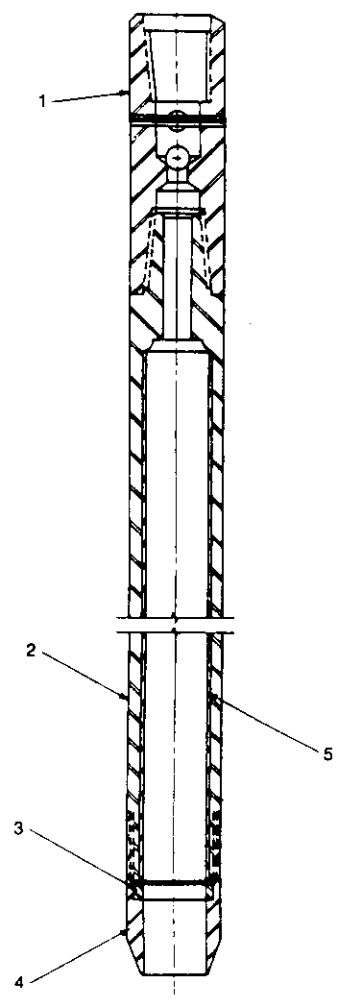
Another tool for removing debris from the bottom will incorporate a device similar to a split barrel sampler used in soil sampling tools. This would be a tube with spring loaded fingers that would be dropped to the bottom of the hole and would raised an inch or so. The pump would then be turned on and the debris sucked up into the tube where the fingers would prevent the debris from falling out the bottom when the pump is turned off.

A bore hole television camera is being designed to enable a look at the hole bottom to determine which type of retrieval tool is necessary. It will be designed so that it will utilize the drill cable to transmit a video image back to the surface. The signal will be digitized at the camera and sent to the surface where it can be displayed on a computer display and saved. This will also offer a unique opportunity to examine the borehole walls or other areas of scientific interest.

Sampling Tools

Split Barrel Sampler

All-purpose sampler used for moisture determination and visual classification. Split barrel permits removal of sample as it is taken from the ground. Generally driven by a 140 lb. hammer falling 30 inches. Blows required to penetrate each foot is often recorded as relative density of material. Used with flap valve or basket trap in non-cohesive soils. Furnished with spacer ring. Order sample retainers separately.



Complete Sampler

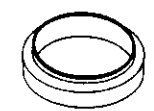
Sampler O.D.	Sampler I.D.	Shoe I.D.	Length Barrel	Rod Conn.	Shoe Type		Weight	
					Terzaghi (Blunt)	ASTM (Sharp)	lb	kg
2" (50.8 mm)	1 1/2" (38.1 mm)	1 3/8" (34.9 mm)	18" (457.2 mm)	AW	67006-10	67006-09	13.6	6.2
			24" (609.6 mm)	AWML	67006-04	67006-03	13.6	6.2
			18" (457.2 mm)	AW	67006-12	67006-11	16.0	7.3
			24" (609.6 mm)	AWML	67006-06	67006-05	16.0	7.3
2 1/2" (63.5 mm)	2" (50.8 mm)	1 7/8" (47.6 mm)	18" (457.2 mm)	AW	007104	006434	18.9	8.6
			24" (609.6 mm)	AW	007105	007100	22.4	10.2
3" (76.2 mm)	2 1/2" (63.5 mm)	2 3/8" (60.3 mm)	18" (457.2 mm)	NW	67008-10	67008-09	26.3	11.9
			24" (609.6 mm)		67008-12	67008-11	28.0	12.7
			18" (457.2 mm)	NWML	67008-04	67008-03	26.3	11.9
			24" (609.6 mm)		67008-06	67008-05	28.3	12.7
3 1/2" (88.9 mm)	3" (76.2 mm)	2 1/4" (73 mm)	18" (457.2 mm)	NW	007106	006440	34.3	15.6
			24" (609.6 mm)		007107	007101	39.0	17.7



Basket Retainer (Heavy-Duty) Ref. No. 3



Spring Retainer (Light-Duty) Ref. No. 3



Adapter Ring Ref. No. 3



Flap Valve Ref. No. 3

Parts

Ref. No.	Part	2" O.D. (50.8 mm)		2 1/2" O.D. (63.5 mm)		3" O.D. (76.2 mm)		3 1/2" (88.9 mm)					
		Part No.	Weight lb	Weight kg	Part No.	Weight lb	Weight kg	Part No.	Weight lb	Weight kg			
1	Head Assembly*, with AW box conn.	67021-02	2.3	1.0	006340	4.0	1.8	-----	-----	-----			
1	Head Assembly*, with AWML box conn.	67021-01	2.3	1.0	-----	-----	-----	-----	-----	-----			
1	Head Assembly*, with NW box conn.	-----	-----	-----	-----	-----	67021-04	7.0	3.2	006342	11.0	5.0	
1	Head Assembly*, with NWML box conn.	-----	-----	-----	-----	-----	67021-03	7.0	3.2	-----	-----	-----	
2	18" (457.2 mm) split barrel	67022-02	6.6	3.0	006078	8.3	3.8	67022-05	11.0	5.0	006080	13.0	5.9
2	24" (609.6 mm) split barrel	67022-03	8.8	4.0	006082	11.0	5.0	67022-06	13.0	5.9	006084	15.5	7.0
3	Spacer	190006-01	.2	.08	190006-02	.3	.14	190006-03	.4	.17	190006-04	.4	.17
4	Shoe, Terzaghi (blunt)	190071-01	1.0	.5	007102	1.6	.7	190071-03	2.0	.9	007103	2.5	1.1
4	Shoe, ASTM (sharp)	190071-02	1.0	.5	002414	1.6	.7	190071-04	2.0	.9	002416	2.5	1.1
OPTIONAL ACCESSORIES													
5	18" (457.2 mm) paper liner	190077-02	.3	.14	-----	-----	-----	-----	-----	-----	-----	-----	
5	24" (609.6 mm) paper liner	190077-03	.3	.14	-----	-----	-----	-----	-----	-----	-----	-----	
3	Spring retainer (light-duty)	005420	.2	.08	-----	-----	-----	-----	-----	-----	-----	-----	
3	Adaptor ring (for 005420)	006746	.3	.14	-----	-----	-----	-----	-----	-----	-----	-----	
3	Basket retainer (heavy-duty)	190033	.2	.08	002413	.3	.14	002419	.4	.17	002420	.5	.2
3	Flap valve	002421	.4	.17	002422	.2	.08	002423	.3	.14	002424	.5	.2

*Includes ball and roll pin.



Sampling Tools

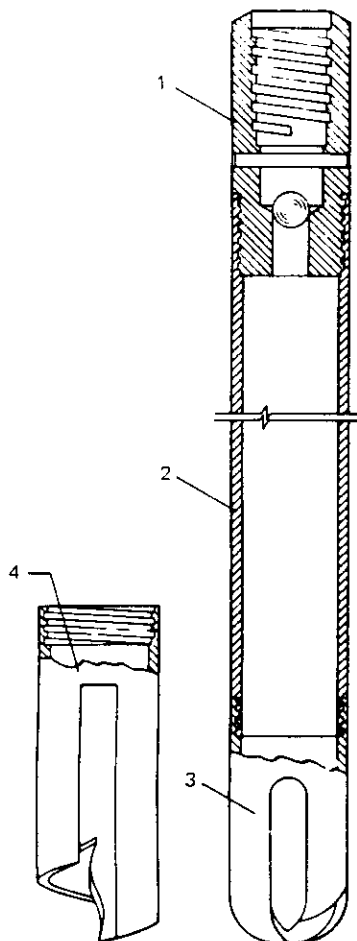
Spoon Sampler

The Spoon Sampler is a solid barrel type sampler equipped with special shoes for recovering samples from non-cohesive materials such as sand and small size gravel.

The samples are disturbed and are, therefore, suitable only for visual inspection in the field or general classification testing in the laboratory.

This sampler is always rotated through the material being tested. It is furnished with two types of shoes: an "Iwan Pattern" for sampling coarse sand and gravel and a "Flat Spiral" for sampling finer sizes of granular material.

Standard barrel length is 60". Other lengths are available.



Complete Sampler—60" (1524 mm) Barrel

Size O. D.	Size I. D.	Rod Conn.	Part No.	Weight	
				lb	kg
2" (50.8 mm)	1½" (38.1 mm)	A	002431	19	8.6
		AW	006458		
2½" (63.5 mm)	2" (50.8 mm)	A	002432	33.4	15.2
		AW	006459		
3" (76.2 mm)	2½" (63.5 mm)	N	002433	40	18.1
		NW	006460		
3½" (88.9 mm)	3" (76.2 mm)	N	002434	50.3	22.8
		NW	006461		
4" (101.6 mm)	3½" (88.9 mm)	N	002435	60.7	27.5
		NW	006462		

NOTE: Complete sampler includes both the Iwan and flat spiral shoes.

Replacement Parts

Ref. No.	Name of Part	2" O. D. (50.8 mm)			2½" O. D. (63.5 mm)			3" O. D. (76.2 mm)			3½" O. D. (88.9 mm)			4" O. D. (101.6 mm)		
		Part No.	lb	kg	Part No.	lb	kg	Part No.	lb	kg	Part No.	lb	kg	Part No.	lb	kg
1	Head, "A" Box Conn.*	002409	2.25	1.0	002410	4.1	1.8	---	---	---	---	---	---	---	---	---
1	Head, "AW" Box Conn.*	006339	2	.9	006340	4	1.8	---	---	---	---	---	---	---	---	---
1	Head, "N" Box Conn.*	---	---	---	---	---	---	002411	7.8	3.5	002412	12	5.4	006453	15	6.8
1	Head, "NW" Box Conn.*	---	---	---	---	---	---	006341	7	3.2	006342	11	5.0	006454	14	6.4
2	60" (1524 mm) Barrel	006351	23	10.4	006352	25	11.3	006353	37	16.8	006354	43	19.5	006455	52	23.6
3	Iwan Shoe	006463	1.7	.7	006464	3.2	1.5	006465	4.0	1.8	006466	4.6	2.1	006467	5.4	2.4
4	Spiral Shoe	006468	2.4	1.1	006469	4.7	2.1	006470	5.7	2.6	006741	7.0	3.2	006472	9.0	4.1

Weights are not listed for parts weighing less than 1 lb (.45 kg).

*Includes ball and roll pin.



PURCHASING
TRACKING SYSTEM

VENOR	DESCRIPTION	POINT OF CONTACT	PHONE #	COMMENTS	REQUIRED DATE ENTERED BY	PO DATE	PRN#	PA RECEIVED BY	ANTICIPATED SHIP DATE	ACTUAL SHIP DATE	SUPPLYING DESTINATION	ANTICIPATED DELIVERY DATE	ACTUAL DELIVERY DATE	TCO #
MOEL	UV-monitoring lab rental	Rale Statls	907-452-4448	going thru FCC	//	11/23/90	//	//	//	//	//	//	//	//
Adiaz Inc	(6)Sample Composite Tubes	Jack Beester	482-432-2523	confirming cid in 11/9/90	//	11/04/90	066445	11/09/90	//	//	Pico	//	//	//
Air Hydraulic System	150' Mercury hose & fittings	Chuck	482-339-6263	called in 10-18-90	//	10/16/90	065624	10/18/90	//	//	Picked up by J. Ryme	//	10/19/90	//
Air Rentals & Sales	Fork-lift Rental	Cliff Events	907-474-0482	called in 10-26-90	//	10/22/90	066027	10/26/90	//	//	Pico warehouse	//	10/26/90	//
Amer Machine Works	Recut (2) heads for drill	Bob Cahn	482-342-4041	called in 10-22-90	//	10/17/90	065652	10/22/90	11/04/90	11/15/90	picoheads sect10-22	//	//	//
Amer Plastics & Sapp Nylon pipe & rod		Bral	482-346-7000	called info-10-90	//	10/16/90	065625	10/18/90	//	//	picked up by J. Ryme	//	10/19/90	//
Com Bin Systems	Autocad Version 010	Suzan Humphrey	907-563-8384	confirming	//	12/03/90	//	//	//	//	14-day 800	//	//	//
Corland Cable Co.	Test cable soaked in lube	John Power	587-723-8276	pico to sent cable supplies	12/15/90	11/06/90	066586	//	//	//	PICD approx 2 weeks	//	//	//
CS & S Chandler Co	Pistonia Resistant Monitor	Judy Perkins	918-627-7137	called in 10-12-90	//	10/09/90	065361	10/12/90	//	//	Pico/Received	//	10/15/90	//
Edmond Scientific	(2) 150lb. Indent. Magnets	catalog	609-573-6250	Resubmitted/through Acct. No.	//	11/07/90	066446	//	//	//	Pico	//	//	//
Encoder Products	Shaft encoder for 5.2" wet drill Spd		288-263-8541	confirming	01/15/91	12/06/90	//	//	//	//	pico	//	//	//
Endic Paper Tube Co	900 Core tubes	Shirley	215-285-0166		11/15/90	06127/90	091443	//	11/15/90	10/04/90	NSF/Port Harnece, CA	10/08/90	//	64ctms/48lbsyca
FCC-Experimental	Application Fee for 1000CS01		202-653-0146	Cash-Pay (Prepaid)	//	10/02/90	065650	//	11/16/90	11/14/90	Pico	//	//	//
Fittings Inc	250' Synflex hose	Bordy or Tia	800-628-8332	called in 10-26-90	12/01/90	10/24/90	065900	10/26/90	11/16/90	11/16/90	Pico	//	//	//
Garner Industries	Nozzle part for water drill	Ray Leathersman	482-464-5911	called in 10-10-90	10/25/90	10/16/90	065635	10/18/90	//	//	picked up by J. Ryme	//	10/21/90	//
Green Tank & Welding	10-1/2" Trough Section-drill test Rent		907-452-1711		01/10/91	12/06/90	//	//	//	//	pico-approx 1-10-91	//	//	//
HBU Systems	Span gas cylinder 100psi	Rich	617-964-6690	called in 12-7-90	//	12/03/90	067306	12/07/90	//	//	pico - Boston	//	//	//
Hobby Equipment Co	Pressure Valve & Gage	Bonnie	482-423-2236	called in 9-26-90	09/25/90	09/24/90	064599	09/26/90	//	09/25/90	Ryme to pick up	//	09/25/90	//
Industrial Drives	(10) Rare earth magnet motors	Kia Orrell	703-639-2495		12/11/90	10/12/90	066540	//	12/10/90	//	Pico	//	//	//
Industrial Drives	DC drill motor failure eval.	Rich Armstrong	703-639-2495	confirming	//	12/06/90	//	//	//	//	pico	//	//	//
Industrial Pump Sale	Rayne Pump Sistor/Motor	Reggie Light	286-624-8573	6-10 week 000	//	09/21/90	064657	//	12/10/90	//		//	//	//
Insulated Shipping	225 Core Boxes	John Bosa	800-654-2599	3-4 week lead time	10/15/90	06/01/90	062707	//	10/15/90	10/17/90	NSF/Port Harnece, CA	//	10/21/90	//
UC Elevator & Mill	10 Promiss lower Sect. (COBOL)	Woody Jones	015-642-6121	called in 10-31-90 on schedule	//	10/24/90	066062	10/31/90	11/21/90	//	WVF 9/100	//	//	//

VENOR	DESCRIPTION	POINT OF CONTACT	PHONE #	COMMENTS	REQUIRED DATE ENTERED BY	PO DATE	PO# RECEIVED BY	ANTICIPATED SHIP DATE	ACTUAL SHIP DATE	SHIPPING INSTRUCTION	ANTICIPATED DELIVERY DATE	ACTUAL DELIVERY DATE	TON #
Lobus International	4000 Meter Block	David Green	214-750-5821		04/15/91	08/27/98	086234	11/02/98	11/02/98	Pico to specify dest	11/02/98	11/02/98	
McGraw Hill	Auger extension	Kristy	206-767-3233		10/22/98	10/24/98	085479	10/24/98	10/24/98	Pico	10/24/98	10/24/98	
McMaster-Carr Supply	Recycling plungers-ice auger Justice		213-592-5911 called in 12-4-98		12/03/98	12/03/98	083314	12/03/98	12/03/98	pico	12/03/98	12/03/98	
McMaster-Carr Supply	20lb round convex mirror	Catalina	213-592-5911		12/01/91	12/06/98	11/01/98	11/01/98	11/01/98	pico	11/01/98	11/01/98	
Mechanical Products	12" Multi-torque springs	Jane McCarrell	206-395-3000 called in 12-05-98		01/15/98	12/04/98	087289	12/05/98	12/05/98	pico 6-wk. 000	12/05/98	12/05/98	
Midstate Inc	2" Hydraulic 300 comp.equip.	Al Johnson	907-456-6622		01/30/91	12/05/98	11/01/98	11/01/98	11/01/98	pico	11/01/98	11/01/98	
Perkin-Elmer	Thermal Chart Paper	Anita	800-426-9985 called in 10-09-98		10/05/98	10/05/98	085247	10/09/98	10/09/98	Pico/Received	10/09/98	10/11/98	
Power Plus Corp.	Oil regulators/20-gal res.tank Eric Nelson		619-744-3103		02/01/91	12/16/98	11/01/98	11/01/98	11/01/98	pico	11/01/98	11/01/98	
Prentice Hall	Craft of Scientific Writing		Cash-Pay (prepaid)		10/03/98	10/04/98	085053	10/04/98	10/04/98	Pico Received	10/04/98	11/15/98	
Prescott Equip	Pipe for Test Well	Bennis Wilfer	907-652-4417 called in 10-24-98		10/22/98	10/24/98	085000	10/24/98	10/24/98	Test Well Site	10/24/98	11/01/98	
RF Communications Co	Polar Region Users Manual		683-361-2629 Cash-Payment (Prepaid)		10/01/98	10/02/98	084944	10/02/98	10/02/98	Pico received	10/02/98	10/15/98	
Ruanhua Chemical	6" 25-gal dr Ethyl-Alcohol	Ellynn Neeks	313-538-6765 called in 10-19-98		11/09/98	10/10/98	085338	10/10/98	10/10/98	Pico/warehouse	11/05/98	11/05/98	
Sciencore Machine	Blow Mopk w/pins (hand auger) Sam		907-652-4538 called in 10-29-98 not started		10/26/98	10/29/98	086864	10/29/98	10/29/98	Pico-pick up	11/15/98	11/15/98	
Sciencore Machine	4" Auger barrel w/filtes	Sam	907-652-4538 called in 11/12/98		11/04/98	11/09/98	085546	11/09/98	11/12/98	Pico-pick up	11/12/98	11/12/98	
Spraying Systems Co	Spray Nozzle	Sandy	303-838-9882 called in 9-25-98		09/20/98	09/24/98	084685	09/25/98	09/26/98	Deliver to J. Orne	09/26/98	09/26/98	
Upeyevik Impast	Construction of Metl Site	Brite Stotts, Direct.	907-452-4468		10/19/98	10/25/98	085911	10/25/98	10/29/98	Barrow, AK	10/29/98	10/29/98	
Unit Process Co	1/4" Ryno Pump 3/8"p simple pt Terry Gorlick		907-522-1010 faxed poll 10-23-98 no changes		01/01/91	10/15/98	085776	10/22/98	10/23/98	Pico/10-12week 000	10/23/98	10/23/98	
VMR Scientific	Activated Charcoal	Reese	206-575-1500 confirming old in 11/12/98		11/07/98	11/09/98	086566	11/09/98	11/12/98	PICO Gostak	11/12/98	11/16/98	
Van Waters & Rogers	11255-gal dr Poly/ Acetate	Rick Holland	907-344-7444		11/01/98	10/11/98	085500	10/15/98	10/15/98	5-Pico/TK-COSEL	11/05/98	11/05/98	
Visual Metrics	Slide paper-slides-magnifiers catalog		716-424-3300 Cash-Payment/Check enclosed		10/25/98	10/26/98	086836	10/26/98	10/26/98	Pico	11/01/98	11/01/98	
Young Radiator	12" Indent. Water Coolers	Neil Coakburn	414-639-1010 faxed in Proposal		10/31/98	11/00/98	086472	11/00/98	11/02/98	BUCK 0485/2000.106	11/02/98	11/02/98	
bid	Ski-Do Snowmachines				10/16/98	11/01/98	11/01/98	11/01/98	11/01/98		11/01/98	11/01/98	
bid	Forklift		bid processing		12/31/98	11/10/98	11/10/98	11/10/98	11/10/98	pico 12-400 000	11/10/98	11/10/98	
quote	Safety gear for COSEL		quote opening 11-26-98		01/01/91	10/22/98	11/01/98	11/01/98	11/01/98	COSEL-Huawei, 001	11/01/98	11/01/98	

MEDICAL FORMS

(The Medical History Form, Medical Examination
Form, Personal Information Card, and Denatal
Examination Form are still being typeset.)



UNIVERSITY OF ALASKA FAIRBANKS

Polar Ice Coring Office

205 O'Neill Building
Fairbanks, Alaska 99775-1710
(907) 474-5585 (FAX) 474-5582

Dear Greenland Participant:

It is most important to be physically qualified in order to participate in a Greenland science program under the auspices of NSF/DPP. Enclosed please find the following:

- 1) Physician's Instruction Letter (Attachment A)
- 2) Medical History Form (Attachment B)
- 3) Medical Examination Form (Attachment C)
- 4) Medical Examination Release Form (Attachment D)
- 5) Personal Information Card (Attachment E)
- 6) Cover Letter to Dentist (Attachment F)
- 7) Dental Examination Form (Form 603) (Attachment G)
- 8) Privacy Act Compliance (Attachment H)

These should all be completed by you and your doctors. Please return all forms (keep green copy for yourself), required x-rays, and lab tests to:

Medical Director
National Science Foundation
1800 G. Street N.W., Room 439
Washington, D.C. 20550
202-357-7775

The forms must arrive at the PICO UAF office at **least 6 weeks** prior to your planned departure to allow time for evaluation for participation in the Greenland science program. This information will be maintained in accordance with Public Law 93-579 (Privacy Act of 1974). An explanation of this Privacy Act is enclosed as attachment H. The original medical forms will be held by the Medical Director of NSF.

Those participants who were physically qualified for the U.S. Antarctic Program during the previous season are exempt from this examination. However, you must notify the Medical Director (NSF) of this, and forward copies of your antarctic medical examination forms with statement of your current health and indicate any interim medical problems.

Thank you for your cooperation in this matter.

Sincerely,

John J. Kelley
Director

MED-1

Dear Doctor:

Your patient is being considered for participation at a remote field camp on and around the Greenland Ice Sheet. From sea level, the camp is located on the summit of the Greenland ice cap at an effective altitude of about 13,000 ft. Summer temperatures may be below -15°C. Potential medical problems are compounded by possible major delays and difficulties in air evacuation of the sick or injured. A priority of the National Science Foundation is to insure the safety and health of each participant through a pre-deployment medical screening process which takes into consideration the inherent risks of work in this environment. Extensive medical screening is imperative to insure the absence of physical conditions which require close medical follow-up, could be adversely affected by loss of medication, or restricts an individual's activities and creates a burden to his/her associates.

You, as the examining physician, are a key factor in the program's success. A thorough history and physical examination are mandatory each year within six months of deployment. All positive findings must be explained fully and further evaluation should be conducted as necessary. Your personal opinion and comments will be extremely helpful in determining the examinee's fitness for Greenland duty. Conditions which are disqualifying include:

- Coronary Atherosclerotic Heart Disease
- Chronic Obstructive Pulmonary Disease/Asthma
- Diabetes Mellitus (Type I or II)
- Any Endocrinopathy requiring hormonal treatment
- Inflammatory Bowel Disease
- Acute or Chronic Hepatitis
- Seizure Disorders
- Any Axis I or II Psychiatric Diagnoses
- Pregnancy
- Chronic Low Back Pain
- Recurrent Renal Calculi
- AIDS or positive HIV antibody
- Hypertension requiring greater than two medications for adequate control

Please note any prior Arctic/Antarctic or isolated duty the examinee has had. Specific examination requirements and general information are listed in the enclosure.

Once found physically qualified by you, the examinee's health record will be reviewed by the National Science Foundation Medical Director and the final decision for approval, waiver or disapproval will be made by the Director of the Division of Polar Programs, in consultation with the Medical Director.

Mail the original, with pink and yellow copies, of the complete history and physical examination to the following address. Please include all radiology and laboratory reports as well as the original EKG.

Medical Director
National Science Foundation
1800 G Street, N.W., Room 439
Washington, D.C. 20550
202-357-7775

Personnel who have conditions which are disqualifying, but whom you consider capable to perform the duties required of them, may request a waiver from the Director, Division of Polar Programs, N.S.F. via the above address. Waivers will be handled on a case-by-case basis and will be reviewed annually. Specialty consultation will generally be required prior to consideration of a waiver.

The following laboratory studies require:

- (1) Complete History and Physical Examination.
- (2) CBC including WBC sound and platelet estimate.
- (3) Urinalysis with microscopic examination.
- (4) Syphilis Serology.
- (5) Blood type and RH factor.
- (6) Chest X-ray PA and Lateral (size 14" x 17") within six months of initial deployment, every five years thereafter or upon clinical indication.
- (7) 12-lead EKG as baseline and annually for all persons.
- (8) Cervical Pap Smear on all women.
- (9) Serum Cholesterol and Triglycerides for all persons age 35 and over.
- (10) Intraocular Pressure for all persons age 40 and over.
- (11) Hemoglobin Electrophoresis on all individuals with a family history of hemoglobinopathy.
- (12) Fasting Blood Glucose performed on two separate occasions for all persons with a family history of diabetes mellitus or a positive urinalysis for glucose. If greater than 140 mg/dl on either occasion, an internal medicine referral is mandatory.
- (13) Blood Chemistry including electrolytes, SGOT, SCPT, GGT, Bilirubin, BUN, creatinine and glucose if taking diuretics.
- (14) Exercise Stress Testing is strongly recommended for all persons age 40 and over or with significant cardiac risk factors.
- (15) HIV antibody testing is required in order to maintain a walking blood bank.

Vaccination/Skin Testing:

- (1) Tetanus (booster within last 10 years in addition to a full series).
- (2) Tuberculin Skin Test (Mantoux) annually. (Can be waived if chest X-ray within previous 12 months is within normal limits.)

Other Requirements:

- (1) Prescription Eyewear - persons requiring prescription eyewear are required to have two pairs, one of which must be sunglasses; as well as a current prescription recorded in their health record.
- (2) Prescription Drugs - persons requiring chronic medications are required to bring sufficient supply of their own medications to last through the entire deployment. Please note all medications that the examinee is currently taking in their health record.

Thank you for your assistance with this process. If you desire, please contact me at the address or phone number listed below to discuss items in greater detail or for any additional information.

COMPLETED EXAMINATION FORMS SHOULD BE SENT TO:

MEDICAL DIRECTOR
NATIONAL SCIENCE FOUNDATION
1800 G STREET, N.W., ROOM 439
WASHINGTON, D.C. 20550
202-357-7775

Sincerely,

Robert Ingram, M.D.

MED-A

MEDICAL EXAMINATION RELEASE FORM

Completed by: _____

To Dr. _____
(examining physician's name)

(address)

(state)

I authorize you to release all medical information pertaining to me to the National Science Foundation and, if necessary, discuss your findings with the Medical Director, NSF 202-357-7775. The information is needed to process my application for employment or service in Greenland. Transmission of this information would normally be via mail, but in certain instances due to time, transmission via electronic mail or telephone discussion with Medical Director, NSF is authorized.

Signature of Applicant or Grantee

Date

(This form to be retained by physician)

Dear Dentist:

This individual is being considered for participation in one of the United States Polar Research Programs in Greenland. Because of Greenland's isolation and lack of dental facilities, program participants must be in top dental condition before leaving the United States; i.e. no caries, no periodontal disease, no endodontic problems, no impacted third molars, no severe prosthetic deficiencies or other significant oral problems.

Your patient will be working at about 13,000 ft., on the Greenland ice cap. The dental examination your perform in support of this qualification process requires mouth mirror and explorer probe exam, periodontal exam, and appropriate x-ray coverage. Examination results should be recorded in section I of the attached Standard Form 603. Should you or a colleague perform dental work to meet the qualifications, each procedure performed should be listed in section III or SF 603.

Posterior double bite-wing x-rays are required yearly for every candidate. Panorex or full mouth x-rays are required for all new candidates and once every five years for repeat personnel. X-rays should accompany the completed examination form. Should you require the x-rays to complete treatment of the candidate, you may forward them later, along with your final statement of dental qualifications.

Scaling prophylaxis and oral hygiene instruction is encouraged.

The completed examination form, the required x-rays, and any other correspondence, should be sent to:

Medical Director
National Science Foundation
1800 G Street, N.W., Room 439
Washington, D.C. 20550
202-357-7775

Thank you for your time and cooperation.

Sincerely,

Robert A. Ingram, M.D.
Medical Director

PRIVACY ACT COMPLIANCE

Medical Examination Form
Dental Examination Form
Medical History Form
Personal Information Card

The above listed forms are necessary to obtain information for your proposed trip to Greenland. This information will be maintained in accordance with Public Law 93-579 (Privacy Act of 1974).

The medical/dental forms will be forwarded to the National Science Foundation, Medical Director, for review and certification of physical qualification for Greenland duty. A sealed copy will be maintained in PICO's field office in Greenland and will only be opened in the event of a medical emergency.

The Personal Information Form, which you will complete prior to your departure, provides information to be used in case of an emergency. These forms are maintained at the National Science Foundation, Medical Director's office in Washington and at PICO's field office in Greenland.

MED-H

CAMP PERSONNEL

GISP2 STAFFING 1991

<u>POSITION:</u>	<u>NO.</u>	<u>STARTING DATE:</u>	<u>ENDING DATE:</u>
G.F.A.	2	1 WEEK PRIOR TO OPEN	CAMP CLOSE
E.O.	1	1 WEEK PRIOR TO OPEN	CAMP CLOSE
MECHANIC	1	2 WEEKS PRIOR TO OPEN	CAMP CLOSE
MEDIC	1	1 WEEK PRIOR TO OPEN	CAMP CLOSE
COOK, HEAD	1	2 WEEKS PRIOR TO OPEN	CAMP CLOSE
COOK, ASST.	1	2 WEEKS PRIOR TO OPEN	CAMP CLOSE
ELECTRICIAN	1	1 WEEK PRIOR TO OPEN	1.5 MONTHS
PLUMBER	1	2 WEEKS PRIOR TO OPEN	1.5 MONTHS
CARPENTER	3	2 WEEKS PRIOR TO OPEN	2 MONTHS?
SAFETY MEDIC	1	FULL SEASON	
DRILLERS	12	FULL SEASON	
CAMP MANAGER	1	FULL SEASON	
HEAD DRILLER	1	FULL SEASON	
KOCI, BRUCE	1	TEMPORARY	
HANCOCK, WALT	1	TEMPORARY	


MEDIC SAFETY OFFICER:

THIS POSITION WILL TAKE ON ADDITIONAL DUTIES OF ASSISTING IN CAMP MANAGER'S OFFICE.

1. AIRCRAFT AND GENERAL COMMUNICATIONS
2. WEATHER OBSERVATIONS
3. TELEX SCREENING AND OPERATIONS
4. PAX AND CARGO MOVEMENTS

PICO EMPLOYEES: 29 AT HIGH CAPACITY
 24 AT NORMAL CAPACITY

SUBJECT: GISP2 1991 STAFFING
PRESENTER: JAY KLINCK
STATUS: DISCUSSION



GISP2
PHASE-UP PLAN

DRAFT

PHASE UP FOR GISP2 1991

PUT IN FLIGHT 12 PICO

CAMP MGR	1
EQUIPMENT OPERATOR	1
MEDIC/SAFETY	1
MECHANIC	1
CARPENTER	3
GFA's	2
COOK	1

SECOND FLIGHT 3 PICO

PLUMBER	1
ELECTRICIAN	1
ASSITANT COOK	1

THE SCIENCE PERSONNEL FOR PHASE UP IS TO T.B.A.

THE REPLACEMENT SKIDOO'S SHOULD BE BROUGHT IN ON THE FIRST FLIGHT ALONG WITH RADIO GEAR, FOOD MAKING UP THE PUT IN FLIGHT TO 10,000 LB.

THE REPLACEMENT CAT (IF PURCHASED) SHOULD BE BROUGHT IN AS SOON AS SKIWAY CONDITIONS ARE ACCEPTABLE TO THE AIR FORCE -

	TASK	MAN HOURS
1.	OPEN THE BIG HOUSE AND ACTIVATE RADIOS AND WEATHER EQUIPMENT	12
2.	DOCUMENT, SURVEY AND PHOTOGRAPH THE DRIFTING	24
3.	DIG OUT DOOR - PREHEAT THE GENERATOR, CHARGE BATTERIES AND ACTIVATE GENERATORS	16
4.	DIG OUT, PREHEAT AND ACTIVATE THE TUCKER AND OLD 931 CAT	16
5.	REMOVE THE WINDOW COVERS ON THE BIG HOUSE	6
6.	EXCAVATE AND GROOM ACCUMULATED SNOW AROUND BIG HOUSE PLUS BATH AND GENERATORS MODULES PLUS FOOD TRENCH	48
7.	RE-CONNECT THE SEWER AND WATER SUPPLY PIPING ON THE BIG HOUSE	8
8.	ACTIVATE THE MELTER AND WATER SYSTEM TO THE BIG HOUSE	8
9.	DIG OUT THE GROOMER AND REPLACE DAMAGED HYDRAULICS	6
10.	AFTER THE 931 IS STARTED SKIWAY PREPARATION SHOULD BE STARTED	48 *
11.	GROOM AND LEVEL OF THE WEATHERPORT BERTHING & TENT AREAS	8
12.	ERECT BERTHING WEATHERPORTS: INCLUDES HEATERS AND ELECTRICAL THIS WOULD BE 4 PEOPLE 8 HOURS PER STRUCTURE WITH 8 STRUCTURES	32 EA. 256

13.	DIG OUT LAB VAN AND CORE PROCESSING TRENCH WEATHERPORT	48
14.	EXCAVATE REAR ENTRANCE OF CORE PROCESSING TRENCH	8
15.	STABILIZE CORE PROCESSING TRENCH ROOF	T.B.A.
16.	DISMANTLE AND RELOCATE C.P. ENTRANCE WEATHERPORT TO BERTHING	75
16.	ERECT NEW ENTRANCE TO CORE PROCESSING TRENCH	T.B.A.
17.	CONSTRUCT NEW ENCLOSURE FOR WINCH AND CORE BARREL	T.B.A.
18.	REMOVE CAP FROM DOME CENTER	12
19.	DIG OUT SIDE LABS IN C.P. TRENCH	150
20.	INSTALL VENTILATION AND WIRING	48
21.	ENLARGE FREEZER UNIT	36
22.	RELOCATE COMPRESSOR UNIT OFF THE SIDE OF THE DOME	<u>56</u>
23.	DRILLERS REQUIREMENTS T.B.A.	SUB TOTAL <u>887</u>

FOR INCLEMENT WEATHER AND OTHER UNFORESEEN CONDITIONS 25% WAS ADDED TO ABOVE FIGURES

* THE PHASE UP TIME LARGELY DEPENDS ON HOW MUCH DRIFTING WILL BE REALIZED AND WHAT CONDITION ARE FOUND WHEN WE PUT IN.

PHASE UP PLAN FOR DRILLING OPERATIONS
1991 SEASON

DIG OUT - OPEN UP DOME	1 DAY
CLEAN OUT & REORGANIZE DOME CONTENTS	4 DAYS
BUILD DOGHOUSE FOR 4000 METER WINCH	7 DAYS
BUILD DOGHOUSE FOR TILT TABLE	2 DAYS
INSTALL 4000 METER WINCH	7 DAYS
INSTALL NEW TILT TABLE	4 DAYS
INSTALL CORE TABLE	2 DAYS
SET UP BUTYL FARM	3 DAYS
DRILL ASSEMBLY & TEST	2 DAYS
DEBRIS RECOVERY	2 DAYS
3 WEEKS FROM ARRIVAL TO COMMENCEMENT OF DRILLING	

CAMP MEDIC

JDQ

UNIVERSITY OF ALASKA
JOB DESCRIPTION QUESTIONNAIRE

This form is used to evaluate non-exempt jobs at the University of Alaska. A position evaluation is conducted to determine specific job requirements for new and/or existing jobs through establishing the appropriate salary range, job category and title for the position.

The results of the evaluation are determined by a variety of factors, each of which is addressed in the questionnaire.

This questionnaire is to be completed by the person in the position. If it is a new job, the questionnaire is to be completed by the supervisor.

It is recommended that you contact your HRD/Personnel Office and obtain any reference materials and/or guidance before completing the questionnaire. Please respond to each question carefully and completely.

When writing this questionnaire, please describe the job as it actually exists, not as you would like the job to be. This questionnaire seeks to provide information so that the content of the job can be evaluated, not your performance.

NAME _____ DATE December 7, 1990

POSITION TITLE Camp Medic JOB CODE # _____

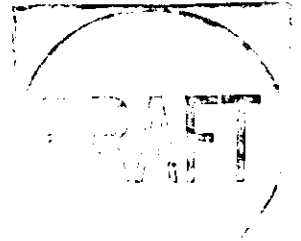
Current Salary Range _____ Position # _____ Fund Source _____

Department, Division, School, Institute Polar Ice Coring Office

Immediate Supervisor Jay Klinck Camp Manager

	Name	Title
Dean, Director, Department Head	<u>Dr. John Kelley</u>	<u>Director</u>

UNIVERSITY OF ALASKA
 JOB DESCRIPTION QUESTIONNAIRE



PRIMARY RESPONSIBILITIES

List your position's primary responsibilities in order of their importance. Under each responsibility, include a list of the specific tasks which make up that responsibility. Indicate whether these tasks are performed regularly (R), occasionally (O) or seldom (S).

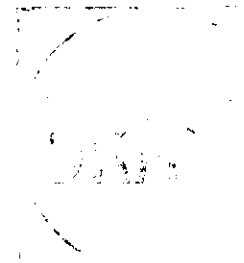
R	O	S	Primary Responsibilities
			<p>Provide medical services as required to camp personnel. This is to include first aid through advanced life support and extended patient care as applicable and feasible. In coordination with PICO management, GISP2 Science Management Office and medical consultants, begin to define level of medical service and emergency medical care appropriate and feasible at GISP2 as administered by a certified EMT III or Paramedic. This process should include an assessment of injuries and illness likely to occur in this setting. This includes medical emergencies, environmental injuries, and non-traumatic diseases</p>
			<p>With assistance from Camp Manager, continue assessment of camp first aid and medical services, supplies and equipment. Organize and document recommendations as required. In coordination with UAF Risk Management Office, define legal standard by which the camp medic will perform designated duties. If agreed standard is defined as those laws that govern EMS practitioner within the State of Alaska, assess implications of operating within a foreign country. (The UAF rescue squad may be a model situation to use in your review). The intent of this assessment is to assess the liability provided, such as restrictions on intravenous infusions, administering of drugs or other advanced life support procedures. These procedures will be coordinated with the United States Air Force Medical Officer at Sondrestrom AFB, Greenland.</p>
			<p>Assess current inventory of first aid and medical supplies in place at the GISP2 site and develop inventory of required equipment, supplies, and medications necessary to keep pace with the elevated standard of care obtainable as administered by a Paramedic or EMT III. This should be defined within the practical limitations of remote site operations. Such equipment may include first responder or paramedic kits.</p>

UNIVERSITY OF ALASKA
JOB DESCRIPTION QUESTIONNAIRE

Primary Responsibilities

R	O	S	
			<p>Assemble all documentation, report forms and resource materials required to accomplish the task and to provide complete documentation of any and all care given on site.</p>
			<p>Assisting the Camp Manager's office. This includes organizing and distributing daily telexes, Maintaining contact with incoming aircraft and relaying real time, weather information as required flight line conditions, etc.</p>
			<p>Assist GFA with outside chores. This includes preparing pallets for retrograde, fueling of camp, maintaining cargo lines, and inventory control for camp supplies.</p>

UNIVERSITY OF ALASKA
JOB DESCRIPTION QUESTIONNAIRE



A. CERTIFICATES OR LICENSES

List any certificates or licenses required for the job:

List the equipment, office machines or tools used in the job:

Blood pressure gauges, stethoscope, computers (both IBM and MacIntosh),
HF and VHF radios.

B. COMPLEXITY OF DUTIES

In what ways does this job require resourcefulness, originality and/or initiative in performing the tasks described in the first part of this questionnaire? Give examples.

What kinds of decisions must you make in order to accomplish those tasks? Give examples.

UNIVERSITY OF ALASKA
JOB DESCRIPTION QUESTIONNAIRE

C. GUIDELINES

What policies, regulations or procedures guide the work of this job?

State of Alaska and foreign laws that govern EMT III practitioners. Will also have to follow the UAF Risk Management policies and procedures.

D. DEGREE OF SUPERVISION RECEIVED

How frequently is instruction given?

Daily interface with the Camp Manager.

How often is work done by the person in this job checked? (Is all work checked? Is it reviewed in stages? Are only completed projects reviewed?)

Only work that will be reviewed is the office work.

What kinds of decisions are made without supervisor approval?

Most medical decisions, however, the medic will be able to confer with the doctor at the main base in Sondrestrom that the USAF operates.

E. IMPACT

What is the impact of work produced or services provided?

This position could be life saving in certain situations.

UNIVERSITY OF ALASKA
JOB DESCRIPTION QUESTIONNAIRE

F. CONFIDENTIAL DATA

Does this job work with confidential materials or papers?

Patient/medic confidentiality.

Describe the nature of your confidential work. (For example: files faculty tenure records; types confidential memos, letters, etc.; processes payroll actions; responsible for assuring safety of records.)

Medical forms and individual medical histories.

Is this job responsible for keys, cash or the security of others?

Yes: Class "A" drugs.

G. CONTACTS WITH OTHERS

List the kind and frequency of contacts with:

Workers within department.

The medic will interface with the entire camp on a daily basis. Medical duties only on an as-needed basis.

Faculty and staff within other departments.

Public.

UNIVERSITY OF ALASKA
JOB DESCRIPTION QUESTIONNAIRE

Students.

H. PHYSICAL DEMANDS/CONDITIONS

Describe the physical demands of the work (Does it involve such physical exertion as climbing, lifting, pushing, stooping, kneeling, crouching, crawling, reaching or balancing?)

All of the above including snow shoveling.

Are physical demands occasional? _____ frequent? continual _____
(Give examples) Equipment at GISP2 is limited and requires all camp staff to assist

when opening and digging out the camp, loading and unloading aircraft, etc.

J. WORK ENVIRONMENT

Describe the work environment (Does it include any risk? Any discomfort? If yes, is the risk or discomfort mild? moderate? severe? Does it occur occasionally? frequently? continually?)

It is cold, unforgiving weather at times. The camp is at an altitude equivalent

to 12,000 ft. This person will also be working around running aircraft.

K. DIRECT SUPERVISION EXERCISED

Does this position supervise others? (List titles of positions supervised)

When medical assistance is required, this person would be in charge. All other

times, no supervising is done by this person.

UNIVERSITY OF ALASKA
JOB DESCRIPTION QUESTIONNAIRE

Indicate the type of supervision given to others (for example, complete overall supervision including hiring, assign work and give instructions for handling assigned work, verify or check work performance).

Supervising will only take place in the event of a medical emergency.

Questionnaire completed by: _____ Date _____
(Please sign) Employee

Contents approved by: _____ Date _____
(Please sign) Immediate Supervisor

Contents approved by: _____ Date _____
(Please sign) Dean, Director, Dept Head

PLEASE NOTE: Signature signifies agreement that the contents of this JDQ are an accurate representation of this job.



Alaska Sea Grant College Program
School of Fisheries and Ocean Sciences
138 Irving II
Fairbanks, Alaska 99775-5040
(907) 474-7086 FAX (907) 474-6285

June 27, 1991

Fellow Communicators:

Here are our subgroups, compiled from responses to my earlier query. Our next meeting will be Tuesday, July 17, from 11:00 a.m. to 1:00 p.m. in the Wood Center Memorial Conference Room. I will send an agenda later. If anyone wants to meet in subgroups before then, it is up to you to contact fellow subgroupers to set up your meeting. If you have not joined a subgroup, but would like to, let me know and I will add your name wherever you want.

Editors

Jackie Stormer 7939
Laura Anderson 7491
Sue Keller 6703
Caroline Collings 7909
Lisa Sporleder 6705

Graphic Artists

Susan Burroughs 7948
Deb Coccia 7250
Lisa Sporleder 6705

Photographers/Videographers

Susan Burroughs 7948

Managers/Producers

Sandy Wolf 7751
Sue Keller 6703

Debra Damron 7581
Kathy Kollodge 6370
Kurt Byers 6702

Writers/Information Officers

Suzanne Bishop 7588
Debra Damron 7581
Kathy Kolledge 6370

Compositors/Desktop Publishers

Sandy Wolf 7751
Susan Burroughs 7948
Rae Ammons 6474
Laura Anderson 7491
Deb Coccia 7250
Caroline Collings 7909
Lisa Sporleder 6705

Press Operators