

DATE: 3/16/70

PLSS H₂O TO LM H₂O (192)

- LOOSEN PGA TORSO TIEDOWN
- PUMP OFF
- CDR DISCONNECT PLSS H₂O
- ✓ PGA CONNECTOR UNLOCKED
- CDR CONNECT LM H₂O
- CB (16) ECS: LCG PUMP-CLOSED

LM H₂O (192) TO PLSS H₂O

- CB(16) ECS: LCG PUMP-OPEN
- CDR DISCONNECT LM H₂O
- CDR CONNECT PLSS H₂O
- PUMP ON
- TIGHTEN PGA TORSO TIEDOWN

EGRESS

LMP - EVA 1

0+10 PASS JETTISON BAG [EGRESS
TO CDR

PASS LEC TO CDR

0+18 PHOTO FAM [FAM

CAMERA TRANSFER

PHOTO CONTING SAMP.

SHADE f2.8 @ 1/60, 12 fr

SUN f8 @ 1/60, 12 fr

0+25 EGRESS

70 MM CAMERA IN DOORWAY

CLOSE HATCH

ASCENT ✓

FAM - TAKE 70 MM CAMERA

FROM CDR - PLACE ON FOOT PAD

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0+32 TV DEPLOY [S-BAND
RELEASE MESA SNAPS
PEEL MESA
UNSNAP ADAPTER
TRIPOD DEPLOY
PULL 2 SNAPS TV BOX STRAP
RELEASE 2 LENS STRAPS
SET LENS f:44 & CAP LENS, ALSC SW-PEAK
TV ON TRIPOD
UNSTOW CABLE
POSITION 50 FT. OFF +Y
SET LENS -
f:44; DIST:50; ANGLE:25
UNCAP LENS
CAUTION KEEP LENS $\geq 45^\circ$ TO SUN

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START ETB PREP [S-BAND

DEPLOY TABLE

UNSTOW ETB - TAKE OUT BAGS
& SAFETY - STOW ON MESA

LOAD IN ETB -

- LiOH CANS
- PLSS BATTs
- CONT. SAMPLE BAG

HOOK UP LEC

ASSIST CDR ANT. ALIGN

0+45 INGRESS

[S-BAND ✓

TV CKT BKR ✓

S-BAND - LUNAR STAY

TRACK MODE - OFF [ETB PREP

TRANSFER ETB (UP)

[TRANSFER

TRANSF.

OFFLOAD CONSUMABLES
STOW BATTs (OPS AREA)
STOW CANS (ASC. ENG. COVER)
STOW CONT. SAMP (BOTTOM BOOT)
IN ETB - SEQ. CAM, 2 MAGS, TV CAM,
AND MAP
TRANSFER ETB (DOWN)

1+00

EGRESS

CAMERA IN DOORWAY

CLOSE HATCH

DESCEND

TAKE MOVIE CAMERA

FLAG DEPLOY

[UNSTOW

TV REORIENT

FILM CDR - SEQ CAM

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1+10 WALK TO SEQ BAY [TO SEQ BAY

VIA -Y - LM INSPECT.

ALSEP PREP

OPEN DOOR (WHITE)

PKG 2 OUT

HANDLE UP

PULL 4 PINS

HTC DEPLOY

TOOLS IN HTC

DRILL OFF

PLACE ON PAD

SEQ CAM IN HTC

RTG FUELUP

TILT CASK & REMOVE

DOME

[PKG 2 DOWN

CAPSULE INTO RTG

TAKE HTC & DRILL TO MESA

TO DEPLOY ALSEP

BOOM: Pull White Till Pkg
Clear; Ratchet Stripes To
Gnd; Pull Pin Hockey Stick

MANUAL: Pull Release;
Pull String; Haul Out Pkg;
Pull Pin Hockey Stick

SEQ BAY

DATE: 3/12/70

SOLAR WIND IN LiOH HOLE
CSC IN SUN

1+25 MESA TO HTC [TV, PHOTO PANS

MAP, TONGS, GNOMON
EXT. HANDLE, HAMMER
WRENCH

SAFETY LINE IN LMP TOTE BAG
UNLOAD SRC 1

SCALE & BAG ON MESA
IN HTC - CORE STEMS
BAG DISPENSER
CORE STEM CAPS

SEAL ORGANIC SAMPLE, PADS TO SIDE
B & W TV CAM IN SRC HOLE

✓ HTC CONTENTS

DEPLOY SOLAR WIND IF FEASIBLE
(+Y 60 FT.)

REORIENT TV

PUT ON TOTE BAG

2 16 MM MAGS CDR TOTE BAG

PICK UP HTC & DRILL

1+30 TRAVERSE > 300 FT. WEST

TAKE MOVIES OF CDR

SRC

**ALSEP
DEPLOY**

- 1+35 **ALSEP DEPLOY**
- DEPOSIT HTC & DRILL | PKG 1 & 2
VICINITY DRILL SITE | POSITION
- 16 MM CAM IN HTC
PLACE DRILL ON HTC
TAKE TONGS TO CDR
REMOVE CDR 70 MM CAMERA
HELP CDR WITH HOOKUP
TAKE MAST OFF PKG 1 & STOW
- 1+45 REMOVE HFE
RETURN TO HTC & DRILL
EYEBALL ALIGN ELECT. E-W
DETACH PROBE BOX & SPLIT
LEAN 1/2 BOX ON HFE ELECT.

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**DEPLOY HFE CABLES & LOCATE HOLES
(LEAVE PROBES IN BOXES)**

1+55 DRILL ASSEMBLY

BORE HOLE DRILLING

**TO RELEASE STEM - 1/4 TURN CCW
CW BACK, BLIP DOWN, BLIP UP**

HFE DEPLOY

REPORT RAMMER MARKS (INNER/OUTER)

PROBE, HOLE SHIELD, TOP SHIELD

VERIFY ELECT ALIGN

[PHOTO ALSEP

CORE SAMPLE

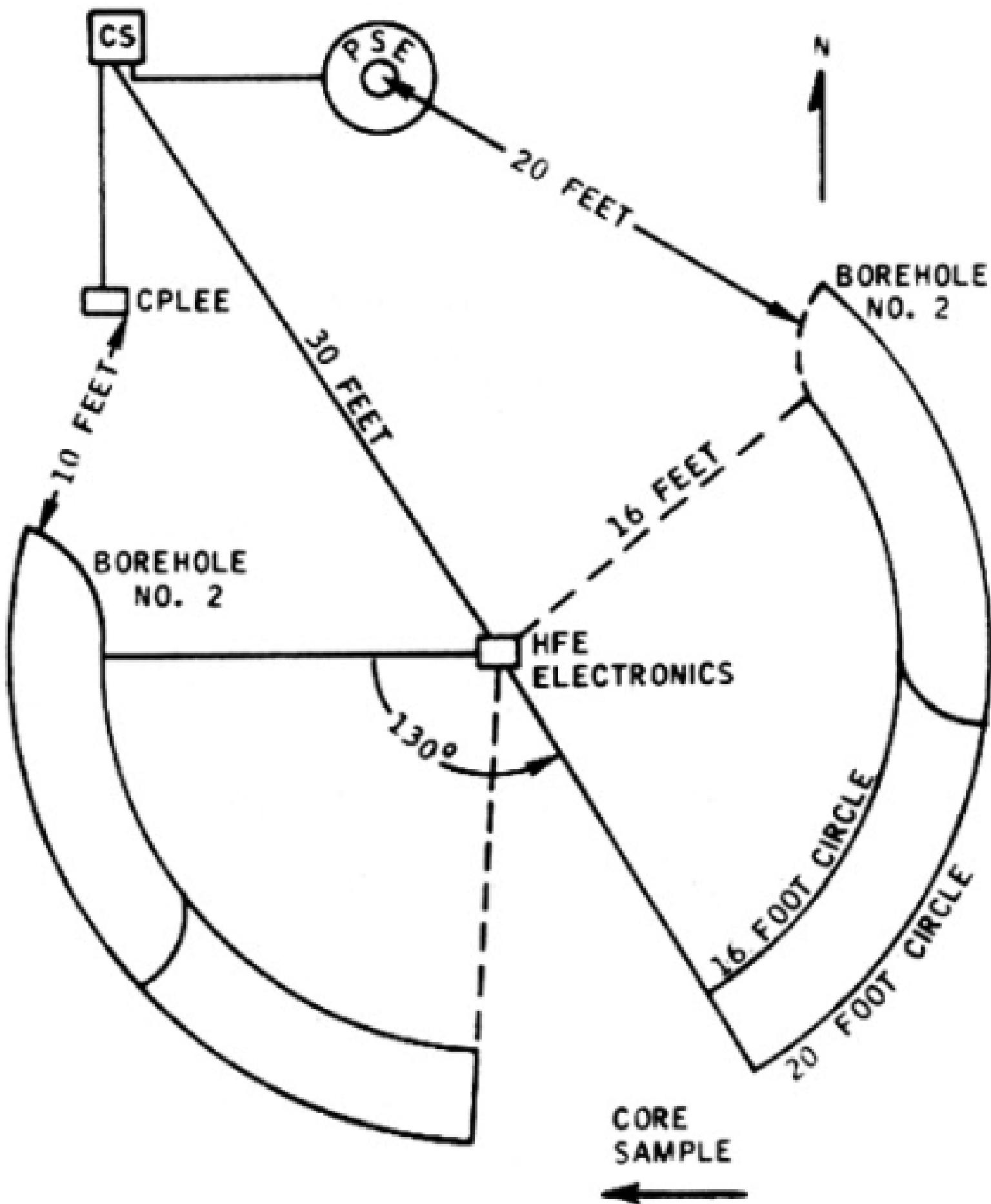
**CCW TO LOCK TREADLE. BREAK JOINTS-
WRENCH CCW ABOVE JOINT, CW BELOW,
THEN RAISE STRING. CAP TOP & BIT
- WIPE STEMS**

**REPORT CAPS & STEM ORDER
START AT TOP & WORK DOWN TO BIT
ADVISE HOUSS - THROW DRILL
ALL DRILL DEBRIS >8 FT. SE
STRIP GLOVES**

RAMMER DOWN CORE HOLE

DRILL

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PLACEMENT OF BOREHOLES
RELATIVE TO THE ELECTRONICS

HOL

RETURN

3+05 EMU ✓

3+10 RETURN TRAVERSE

TAKE MOVIE CAMERA
COLLECT SELECTED SAMPLES
PHOTO DOWN SUN BEFORE
LANDMARK SHOT X SUN -
(BEFORE OR AFTER)
ROCKS - 75 %
FINES - 25 % (OR 10 LBS.)

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- 3+20 SRC 1 PACK
OR
END PLACE HTC AT MESA
TRAV. OFFLOAD SAMPLES FROM TOTE BAGS
PLACE RETURN ITEMS CDR TOTE
CLOSE CDR TOTE -
PLACE ON FOOTPAD
 MAGS IN POUCH
REMOVE SRC 2 - PLACE ON +Y FOOTPAD
SHADY SIDE, LID DOWN SUN
PLACE S-BAND ANT COVER SRC 2
- 3+30 LOAD ETB OR CHECK:
MAP
HAND LENS
CAMERAS
DEPLOY SOLAR WIND (+Y 60 FT.)
(UNLESS DONE)

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EVA TERMINATION

CLEAN EMU

[TRANSFER PREP

TONGS IN HTC

3+40 INGRESS

RAISE EV VISOR

LEC PREP

LEC TRANSFERS

STOW ETB & TOTE BAG

STOW SRC]

[ASCENT

HAND OUT LEC TO CDR

3+52

[INGRESS

4+00 REPRESS

DATE: 3/12/70

LMP - EVA 2

ETB CONTENTS

2 CAMERAS, 3 MAGS (B&W)

1 MOVIE CAMERA, 3 MAGS

POLARIZING FILTER

MAP

JETTISON BAGS TO CDR

HOOK UP LEC

0+15 ETB TRANSFER DOWN

0+20 EGRESS

- CLOSE HATCH
- DESCEND

- PUT 70 MM CAMERA ON RCU

EGRESS

DATE: 3/12/70

- 0+25 GET CSC CAMERA
DEPLOY SKIRT
TAKE LM VICINITY CSC PHOTOS
- 0+27 PUT TOTE BAG ON CDR
RIG LENS BRUSH ON HTC
TONGS ON YO YO
SAFETY & FILTER IN LMP TOTE
- 0+30 MOVIE CAMERA IN HTC
THERMAL DEGRADATION SAMPLE
SAMPLE 1: BAG IN CDR TOTE
UNBAG & UNFOLD - HOLD OUT
SHAKE WHEN DIRTY - HOLD OUT
HOLD WHEN BRUSHED & CSC [CSC
REFOLD & REBAG &
BRUSH]
SAMPLE 2: UNBAG & UNFOLD
SHAKE WHEN DIRTY - HOLD OUT
REFOLD & REBAG [CSC
BAG IN ETB

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SPARE MAGS IN CDR TOTE
SIEVE SAMPLE 5 MINUTES
SELECT & PHOTO TYPICAL AREA
COLLECT INTO EXTRA WEIGH BAG
SEAL BAG & STOW IN ETB
CONTAMINATED SAMPLE (QUAD 3)
TAKE DOWN SUN BEFORE
HOLD BAG FOR CDR & DOUBLE BAG
STOW IN ETB (CDR MAY DO)
COLOR CHART
GET FROM HTC & HOLD FOR CDR
GIVE TO CDR & CHANGE PLACES
POSITION CHART DOWN SUN 5 FT.
TAKE 4 PHOTOS: f:5.6, 8, 11, 16
TAKE 1 PHOTO f:11 45° AZIMUTH
GET CHART & STOW IN HTC
PICK UP HTC & START TRAVERSE

TRAVERSE
REPORT:

ALL MOVEMENTS INCLUDING
DIRECTIONS BETWEEN SAMPLES
LOCATION WRT LM
PHOTOS OTHER THAN NOMINAL
SAMPLE BAG NUMBERS
OBSTRUCTIONS WRT LM- GET BEHIND
& TRY COMM (CDR) LMP PHOTO
OBSTRUCTION, CDR, LM

PHOTOS

PAN AT EACH LEG, SITE, DIRECTION
CHANGE--MAP SHOWS NOMINAL
CSC CAMERA PICTURES-PIGGY BACK
ON DOC. SAMP. AS REQUIRED
REPORT ORIENT & FRAME NO.

CRATER DOCUMENTATION

SERIES OF SAMPLES RADIALLY FROM
CENTER

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CORE SAMPLES (SINGLE & DOUBLE)
TAKE ON SURFACE ONLY(SEE MAP)
BEFORE: REPORT S/N TUBE(S)
DRIVE TUBE(S) & PHOTO X SUN 15 FT
AFTER: PHOTO X SUN STEREO 5 FT

TRENCHES

PHOTO SITE X SUN, DOWN SUN
DIG DOWN SUN OFF 10° f:5.6, 1/125
DOCUMENTED SAMPLES BOTTOM-TOP
FILL, BOTTOM, TOP, SIDES, DISCONS
CSC CAMERA PHOTOS BOTTOM
RESET 70 MM CAMERA 1/250

COLLECT 1 LARGE ROCK- FOOTBALL

USE COLOR CHART

COLLECT FILLET MAT'L & ROCK

DOCUMENT & USE CSC CAMERA

SAMPLE ROCK TRAIL

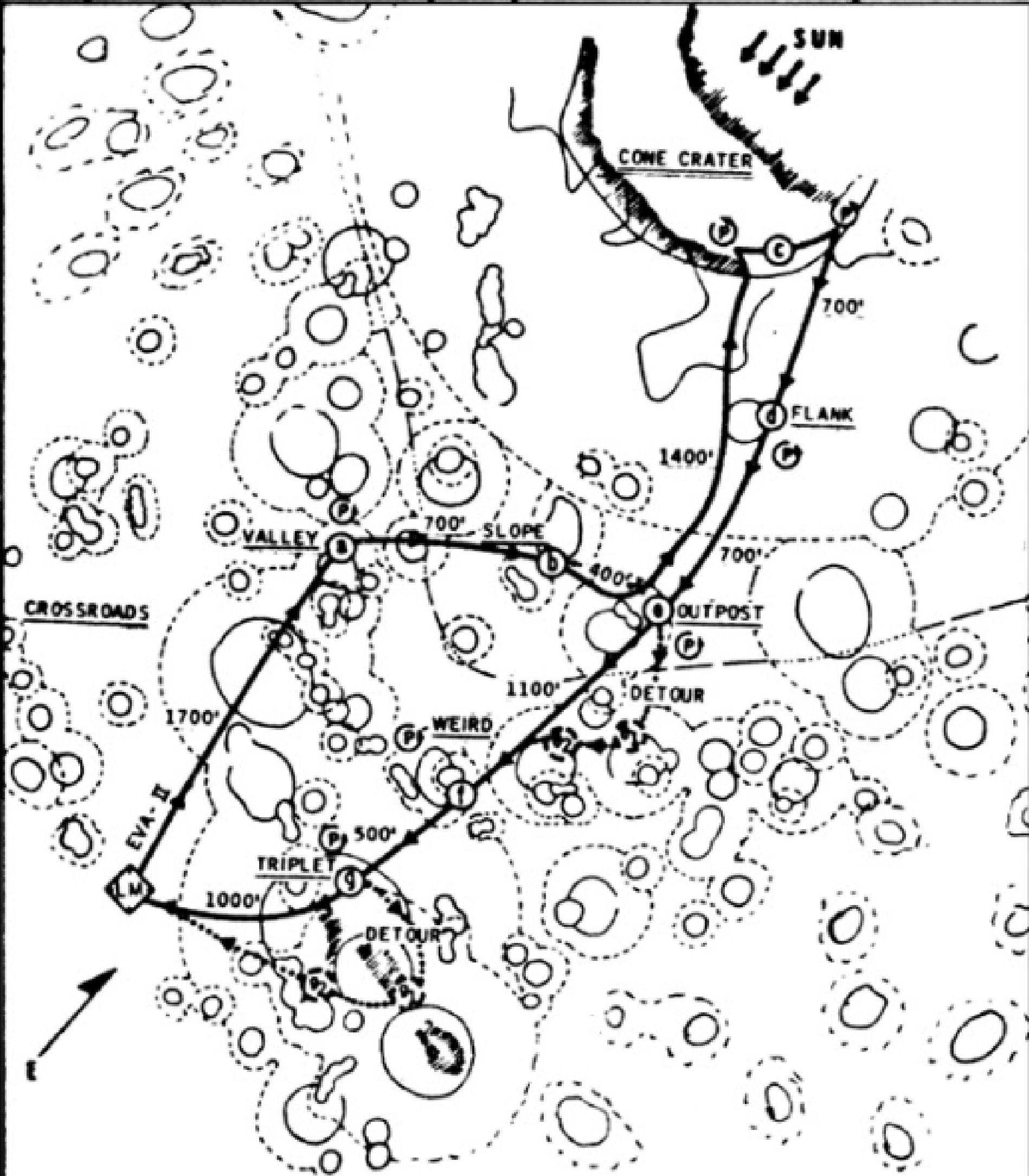
FINES IN & BESIDE-CHIP FROM ROCK

USE CSC CAMERA

SAMPLE CRATER RIM CRESTS

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MAP



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- VALLEY: DOC. SAMP, PAN [7 MIN.
 SURF CHARACT.
- SLOPE: DOC. SAMP, [10 MIN.
 CORE PATTERNED GND
 COMPARE WITH VALLEY
- CONE: 2 PANS RIM 300 FT. BASE
 POLARIZED PIX [30 MIN.
 ROLL BOULDER -24 fps MOVIE
 BOULDER TRACKS & RADIAL
 VARIATIONS, TRY COMM.
- FLANK: DOC. SAMP & PAN [7 MIN.
 COMPARE ROCKS W/CONE
- OUTPOST: DO CUFF CK LIST [30 MIN.
- WEIRD: DOUBLE CORE MULT. EJECTA
 DOC. SAMP SUPERIMPOSED
 ORIGIN ELONG. CRATER [15 MIN.
- TRIPLET: DOC. SAMP, PAN [7 MIN.
 PATTERNED GND

OUTPOST

1. COLLECT GAS ANALYSIS SAMPLE
(SMALL CAN): SEVERAL CLEAN
ROCKS, GLASSES, SPLATTERED
ROCKS, VARIETY DESIRED, DOCU-
MENT COLLECTION AS USUAL
2. COLLECT MAGNETIC SAMPLE
(TEFLON CAN) 2-3 ROCKS
MICROBRECCIA & CRYSTALLINE
DOCUMENT COLLECT AS USUAL
3. DIG DEEP TRENCH (SOIL MECH.)
DOCUMENT BEFORE. THEN f:5.6, 1/125
DIG 2 FT. DEEP 10° OFF DWN SUN
DOCUMENT BEFORE SAMPLING:
LMP STAND DWN SUN EDGE TRENCH
CDR STEREO PR CROSS SUN BOTH
SIDES, THEN 1 SHOT DWN SUN
LMP 1 SHOT UP SUN

OUTPOST

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COMMENT ON SOIL PHYSICAL, MECH
PROPS

TAKE 1CAMERA MPLES BOTTOM TO TOP,
SIDES, DISCONS, FILL. CSC CAMERA
IN BOTTOM, SIDES

DOCUMENT BOOT PRINT IN FILL

4. COLLECT SPEC. ENVIRON SAMPLE
(LARGE CAN): FINE-BOTTOM DEEP
TRENCH - DOCUMENT COLLECTION
5. (LMP) a. USE CSC CAMERA
b. RADIAL FINE SAMPLES SW
OUTPOST CRATER - 3 @ 10 FT.
INTERVALS - PHOTO AFTER
6. (CDR) GO BEHIND ROCK OR INTO
CRATER TO TEST COMM.
7. USE COLOR CHART WITH LARGE ROCKS,
COLOR CONTRASTS

CLOSEOUT

3+20 EVA CLOSEOUT

- REPOSITION TV OFF + Y
[REMOVE TOTE
BAG]
- HOLD TOTE BAG FOR OFFLOAD
- TAKE OFF CDR TOTE BAG & HOLD
FOR OFFLOAD
- HAND HTC SAMPLES TO CDR
- CSC CAM MAG IN ETB
- TAKE DOWN SOLAR WIND - BAG &
PUT IN ETB
- CAMERA IN ETB
- SPARE MAG IN ETB
- SEQ CAMERA MAGS (3) IN ETB
- MAP IN ETB
- COLLECT EXTRA BAG
50 FT FROM LM
- SEAL & STOW IN ETB OR TOTE BAG

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CLOSEOUT

TAKE OFF TONGS

3+40 EVA TERMINATION

CLEAN EMU

INGRESS

HOOKUP LEC

[TRANS
PREP

3+47 LEC TRANSFERS

STOW ETB STOW TOTE BAG

STOW SRC 2

[ASCENT

HAND OUT LEC TO CDR

3+52

[INGRESS

4+00 REPRESS

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