

~~SECRET~~

UNCLASSIFIED

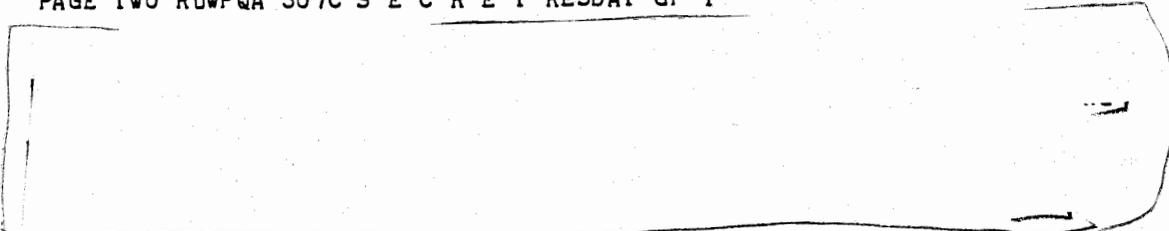
~~SECRET~~

3/16/2002

FEB 18 1968

PAGE TWO RUWPQA 307C S E C R E T RESDAT GP-1

DAE
b(3)



THE DEPTH, BELOW ORIGINAL GROND SURFACE, TO THE TOP OF THE HIGHEST PART OF THE UNIT WAS 3.1 FEET. THE DEEPEST POINT OF UNIT 1 WAS ABOUT 4.5 FEET BELOW ORIGINAL GROUND. GRAVELS AND SMALL ROCKS, UP TO 4 OR 5 INCHES IN DIAMETER, HAD BEEN BROKEN BY THE IMPACT.

THE PAINT ON THE TOP SIDE OF THE UNIT WAS NOT IMPRESSED IN THE PAINT ON THE UNDER SIDE OF THE UNIT WAS COMPLETELY REMOVED AND THE EXPOSED METAL SURFACE HAD SOME STRIATIONS AND ABRASIONS. THE NOSE RING HAD SHEARED OFF, BUT NO OTHER STRUCTURAL DAMAGE WAS APPARENT IN THE UNIT AT THE TIME OF RECOVERY. THE CRATER FOR EXPERIMENT 1 WAS SIMILAR TO THE CR

E

HGG, I *

TGF N G N U RP I I



HE

~~SECRET~~

~~SECRET~~

UNCLASSIFIED

~~SECRET~~

3416/202-

FEB 18 1966

PAGE THREE RUWPQA 307C S E C R E T RESDAT GP-1

3.8 FT. THE DEEPEST POINT OF UNIT 2 WAS ABOUT FIVE FEET BELOW ORIGINAL GROUND SURFACE. THE PAINT ON THE TOP SIDE OF THE UNIT WAS NOT DISTURBED. THE PAINT ON THE UNDER SIDE OF THE UNIT WAS COMPLETELY REMOVED, AND THE EXPOSED METAL SURFACE HAD SOME STRIATIONS AND ABRASIONS. THE NOSE RING HAD SHEARED OFF, BUT NO OTHER STRUCTURAL DAMAGE WAS APPARENT IN THE UNIT AT THE TIME OF RECOVERY.

DESCRIPTION OF CRATERS: THE CRATERS FOR THESE EXPERIMENTS WERE TYPICAL FOR THIS TYPE OF IMPACT IN ALL BUT THE SOFTEST OR HARDEST OF SOILS. THE CRATER AND ITS RAYS (EJECTA) APPEAR DARKER THAN THE ADJACENT GROUND SURFACE IMMEDIATELY AFTER IMPACT. THE DARKER COLOR IS DUE TO THE HIGHER MOISTURE CONTENT OF THE EXPELLED MATERIAL, WHICH COMES FROM JUST BELOW THE DRIER GROUND SURFACE. IMMEDIATELY AFTER IMPACT, THE CRATER AND ITS RAYS ARE EASILY VISIBLE TO AN UNTRAINED OBSERVER WITHIN PERHAPS 20 FEET. FROM PREVIOUS EXPERIENCE, WE CAN STATE THAT THE CRATER AND ITS RAYS WOULD BE STRIKINGLY VISIBLE TO AN AIRBORNE OBSERVER OR ON AIRPHOTOS IMMEDIATELY AFTER IMPACT.

WITHIN A FEW HOURS, DUE TO DRYING, THE CRATER AND ITS RAYS BLEND WITH THE ADJACENT DRIER GROUND, AND ARE THUS DIFFICULT FOR THE UNTRAINED EYE TO DETECT. WITHIN ONE DAY, THE COLORATION OF THE CRATER AND ITS RAYS WILL BE INDISTINGUISHABLE TO THE UNTRAINED EYE. THEREFORE, AFTER

UNCLASSIFIED

- 3 -

~~SECRET~~

~~SECRET~~

UNCLASSIFIED

~~SECRET~~

3416/202-
FEB 18 1966

PAGE FIVE RUWPQA 307C S E C R E T RESDAT GP-1

[REDACTED]

DOE
b(3)

DOE
b(3)

EXCEPTIONS ARE SATURATED LOOSE SANDS,
SOFT CLAYS (SHEAR STRENGTH LESS THAN 500 PSF), AND STIFF-FISSURED
CLAYS. IN THE DORMER TWO CASES, THE CRATER WOULD BE VEGY SMALL, AND
THE PENETRATION WOULD BE GREATER. IN THE LATTER CASE, THE BLOCKY
NATURE OF THE RAYS AND THE FLOOR MATERIAL COULD BE DETECTED BY THE
CDINED EYDFM END REF WDS:DJH (S-25"24)

BT

DISTRIBUTION:

- 1/2A - R. C. MAYDEW 9320, ATTN W. BARTON 9320
- 2/2A - W. R. HOAGLAND, 1544

This is an exact copy: 04/02/97: 7447: cmg.
Distribution:
M0659A Elva Barfield, FOIA Officer/OPA; DOE/AL

NNNN

UNCLASSIFIED

~~SECRET~~