

Closeout Notice Date 09-JUL-1998

Project Number E-25-A42

Doch Id 46637

Center Number 10/24-6-R0534-0A0

Project Director LACKEY, W.

Project Unit MECH ENGR

Sponsor APPLIED SCIENCES INCORPORATED/YELLOW SPRINGS, OHIO

Division Id 3631

Contract Number P.O. NO. 2211

Contract Entity GTRC

Prime Contract Number

Title CVI OF SILICON CARBIDE

Effective Completion Date 19-JUN-1998 (Performance) 19-JUN-1998 (Reports)

Closeout Action:	Y/N	Date Submitted
Final Invoice or Copy of Final Invoice	Y	
Final Report of Inventions and/or Subcontracts	Y	
Government Property Inventory and Related Certificate	N	
Classified Material Certificate	N	
Release and Assignment	N	
Other	N	

Comments

Distribution Required:

Project Director/Principal Investigator	Y
Research Administrative Network	Y
Accounting	Y
Research Security Department	N
Reports Coordinator	Y
Research Property Team	Y
Supply Services Department/Procurement	Y
Georgia Tech Research Corporation	Y
Project File	Y

NOTE: Final Patent Questionnaire sent to PDPI

E25-A42
#1 (Final)

FINAL REPORT

PROJECT E25-A42

CVI OF SILICON CARBIDE

Prepared for Applied Sciences, Inc.

Prepared by Dr. W. Jack Lackey

June 30, 1998

CVI OF SILICON CARBIDE

The project was successfully completed. The attached page gives the experimental conditions and sample arrangement. The resulting material was shipped to the sponsor.

8/14/97

CONDITIONS

Psys	200torr
MTS flow	100ccm
time	5hours
temp	1000degC
H2 diluent	450ccm

Weights	before	after	change
Prime	8.6382	10.7639	2.1257
A	4.465	8.5097	4.0447
B	5.6002	8.5454	2.9452
C	9.3844	12.0445	2.6601
MTS pot	14173.7	13955.2	-218.5
		MTS flow	109.1961

Time	0	5min	10min	20min	30min	45min	1hour	1hr,20min
Power	28.8	27.8	27.7	27.6	27.7	28.4	28.4	27.8
Amperage	228	223	223	221	221	223	223	223
Voltage	18.5	18.3	18.3	18.3	18.1	18.2	18.2	18.2
Tpyr	1000	1000	1000	1000	1000	1000	1000	1000
H2-MTS	16	16	20	20	20	20	20	20
H2-dil	434	434	430	430	430	430	430	430
Psys	188	203	198	200	200	199	200	198
T,MTS	25	25	24	24	24	24	24	24

Time	1hr,40min	1hr,20min	2hrs	2hrs,30min	3hrs	3hrs,30min	4hrs	4hrs,30min
Power	27.3	27.8	26.6	27.6	27.6	27.5	27.6	27.7
Amperage	225	223	222	220	220	220	220	220
Voltage	18.2	18.2	18.0	18.0	18.0	17.9	17.9	17.9
Tpyr	1000	1000	1000	1000	1000	1000	1000	1000
H2-MTS	20	20	26	26	26	26	26	26
H2-dil	430	430	424	424	424	424	424	424
Psys	198	200	198	201	199	200	201	201
T,MTS	24	24	23	23	23	23	23	23

Time	4hrs,30min
Power	27.6
Amperage	220
Voltage	17.9
Tpyr	1000
H2-MTS	26
H2-dil	424
Psys	199
T,MTS	23

SAMPLES "PRIME" AND "C"
 WERE STANDING UPRIGHT,
 "A" & "B" WERE LYING DOWN.

