



INDOFINE Chemical Company, Inc.

121 Stryker Lane, Bldg. 30, Suite 1 • Hillsborough, NJ 08844 • U.S.A.

Phone: (908) 359-6778 • FAX: (908) 359-1179

website: www.indofinechemical.com

e-mail: chemical@indofinechemical.com

CERTIFICATE OF ANALYSIS

Catalog Number: G-002

Product Name: **GOSSYPIN**

CAS Number: [652-78-8]

Lot Number: 1412145

Chemical Formula: C₂₁H₂₀O₁₃

Molecular Weight: 480.38

Melting Point: 210°C (dec)

Appearance: Yellow powder

TLC: n-Butanol:Acetic acid (1:1)

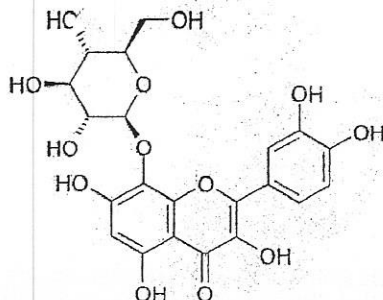
Solubility: Soluble in DMSO

Moisture(KF): 0.3%

NMR Spectrum: Enclosed (conforms to the structure)

Storage: Store in a cool, dry place

Purity(HPLC): 99.3%





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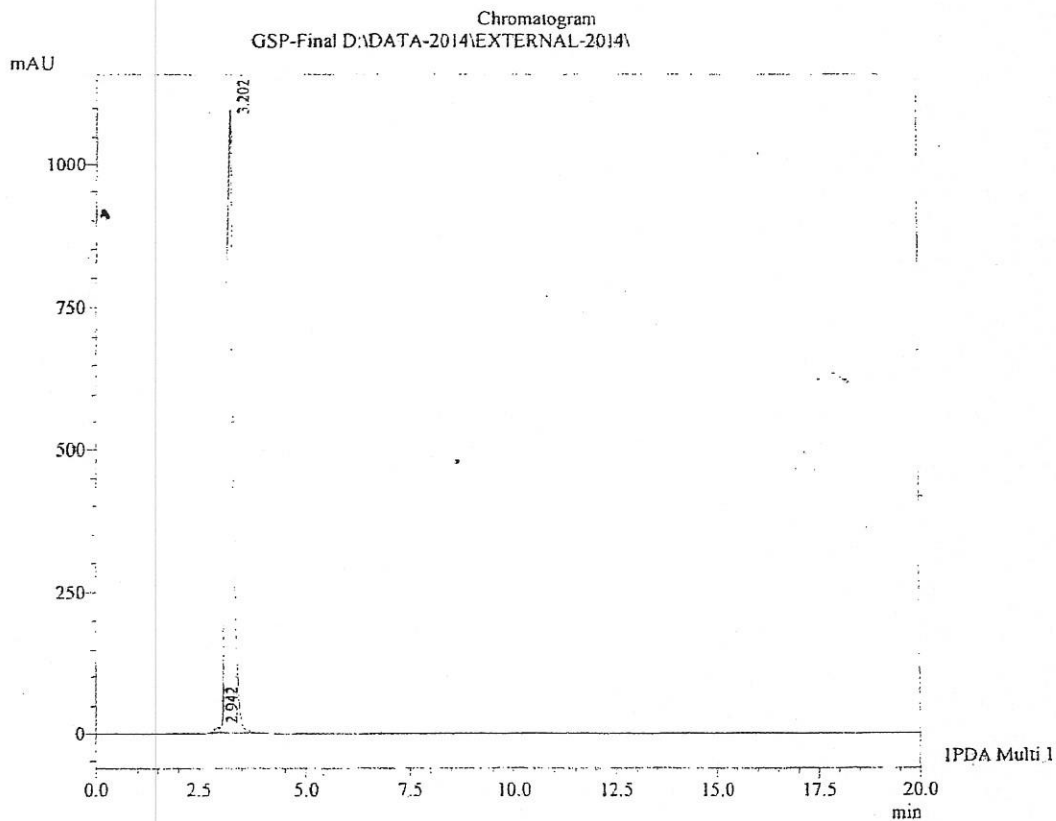
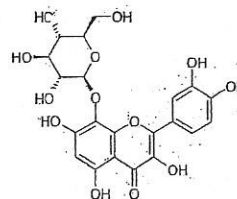
e-mail: chemical@indofinechemical.com

HPLC ANALYSIS

Sample Information

Sample Name : GSP-Final
 Sample ID :
 Data Filename : GSP-Final.lcd
 Description:
 COLUMN : Hypersil BDS-C18, 150 x 4.6mm, 5µ
 Mobile phase : ACN:0.05%TFA in water(50:50)
 Flow Rate : 0.5ml /min
 Program : Isocratic
 Sample preparation : 5.6mg/25ml in Mobile phase
 Vial# : 2
 Injection Volume : 20 µL
 Acquired by : MRR

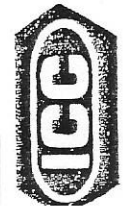
Catalog No.: G-002
 Product Name: Gossypin
 Lot No.: 1412145



1 PDA Multi 1 / 277nm 4nm

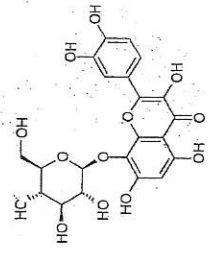
PeakTable

Peak#	Ret. Time	Area	Theoretical Plate#	Relative Retention Time	Area %
1	2.942	86622	581.177	0.919	0.687
2	3.202	12529819	1701.929	1.000	99.313
Total		12616440			100.000

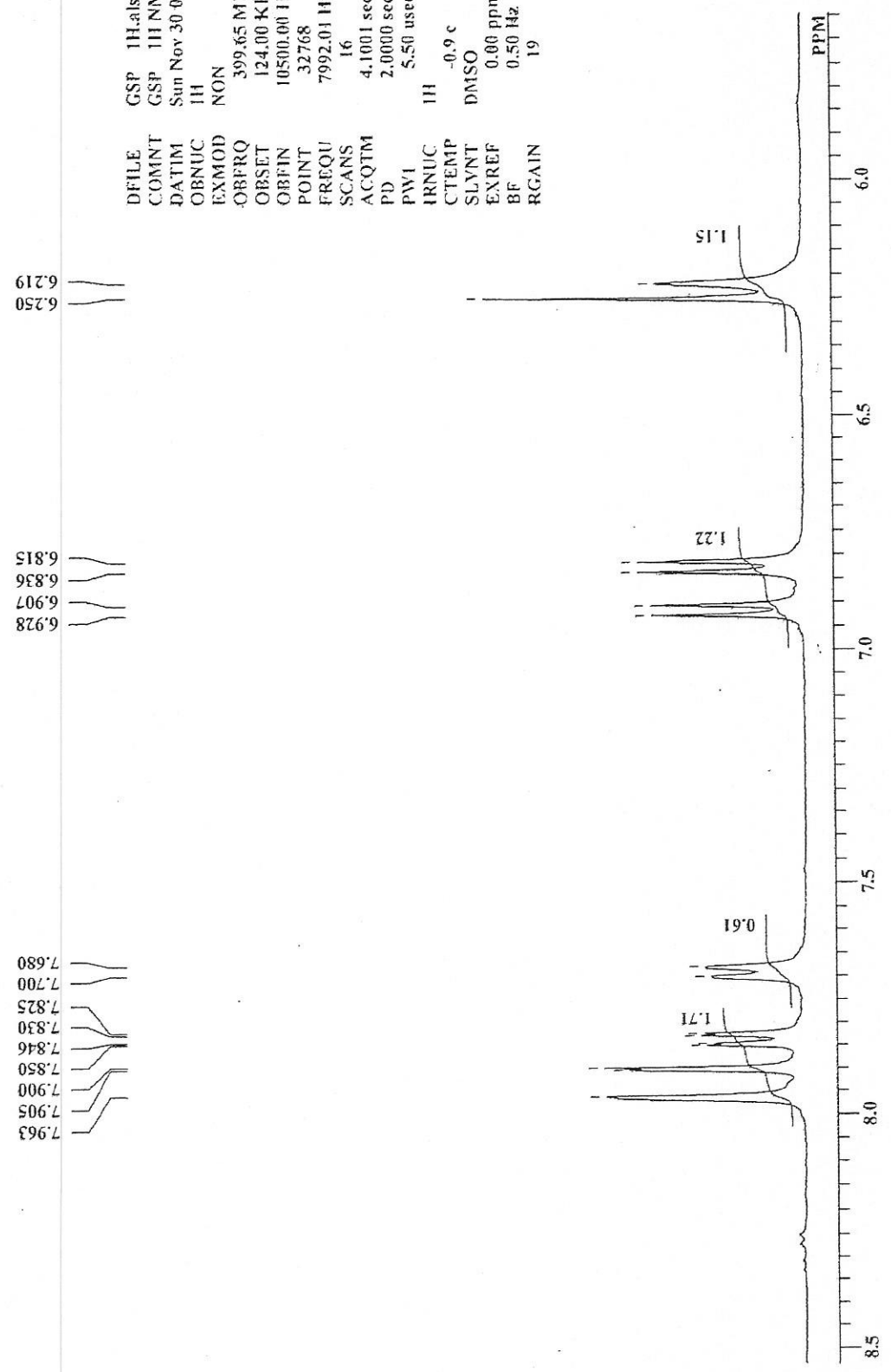


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Catalog No.: G-002
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Lot No.: 1412145



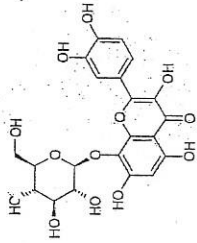
GSP 1H NMR DMSO-d6
Analysed By : MSR



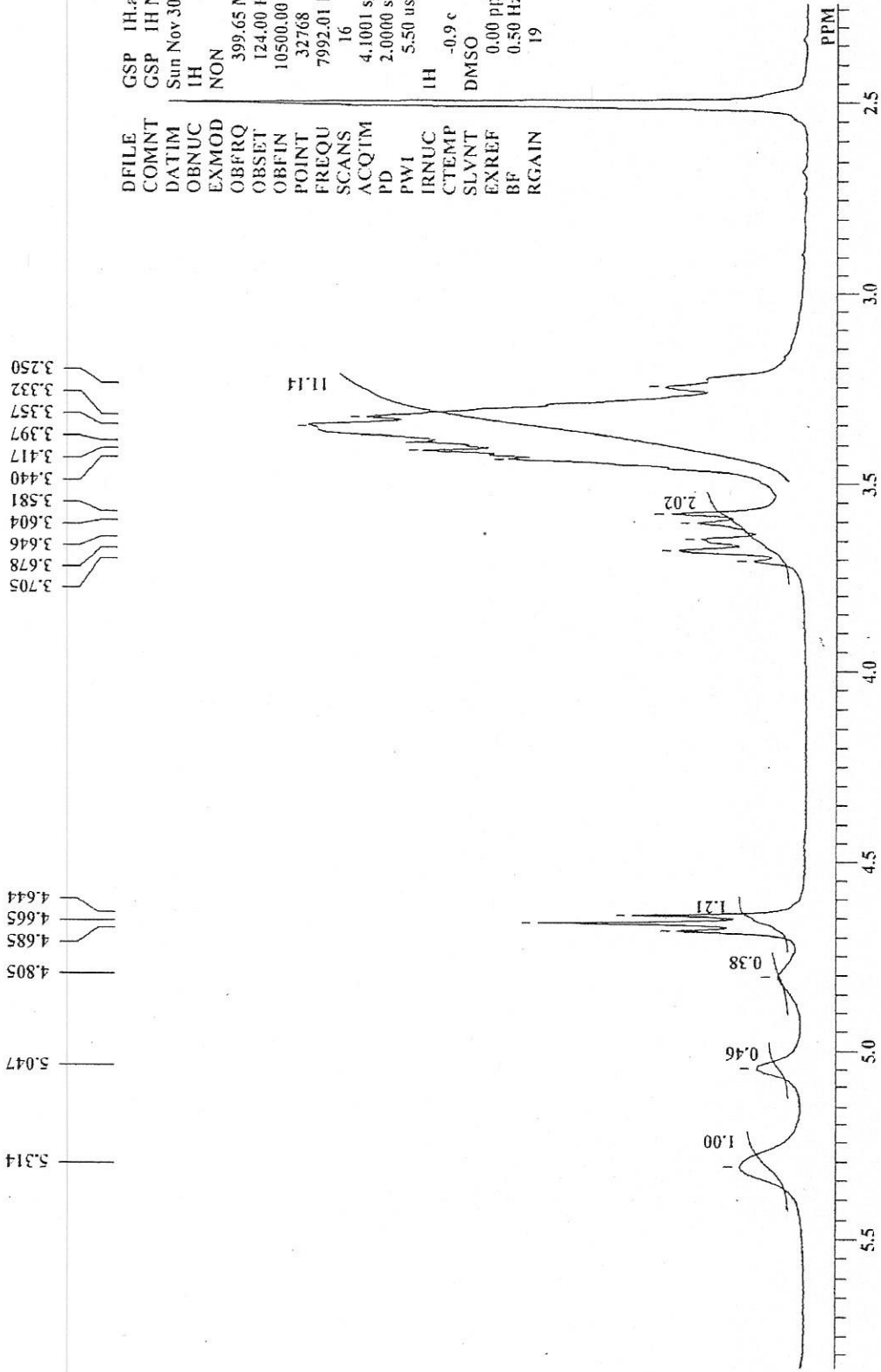


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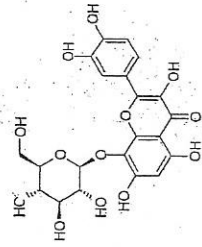


GSP 1H NMR DMSO-d6
 Analysed By: MSR





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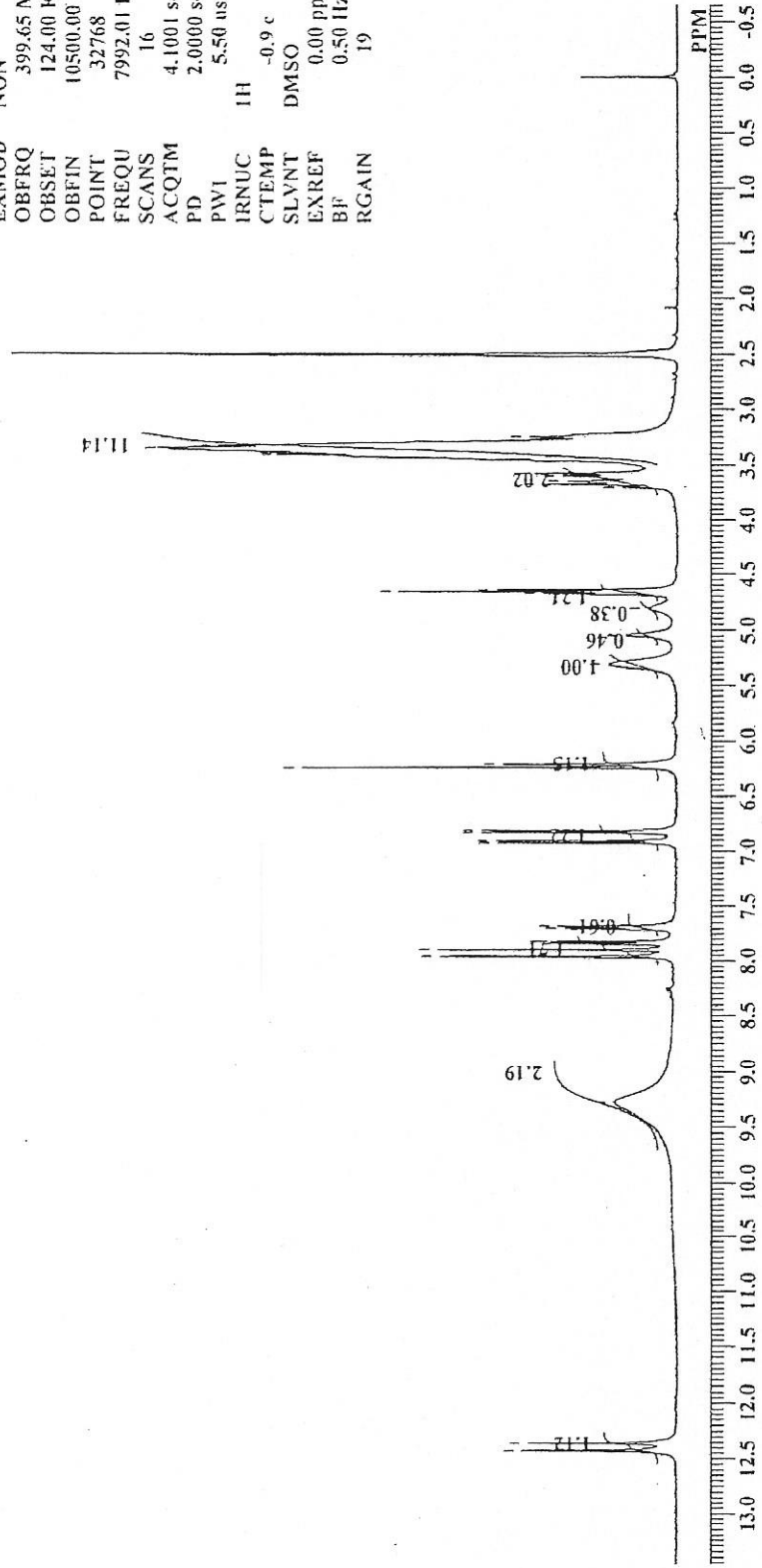


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GSP 1H NMR DMSO-d6
Analysed By: MSR

12.428
12.359
9.281
7.963
7.905
7.900
7.850
7.846
7.830
7.825
7.700
7.680
6.928
6.907
6.836
6.815
6.250
6.219
5.314
5.047
4.805
4.685
4.665
4.644
3.705
3.678
3.646
3.604
3.581
3.440
3.417
3.397
3.357
3.332
3.250

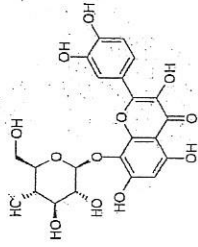
DFILE: GSP 1H.nls
COMNT: GSP 1H NMR DMSO-d6
DATIM: Sun Nov 30 08:07:12 2014
OBNUC: 1H
EXMOD: NON
OBFRQ: 399.65 MHz
OBSET: 124.00 KHz
OBFIN: 10500.00 Hz
POINT: 32768
FREQU: 7992.01 Hz
SCANS: 16
ACQTM: 4.1001 sec
PD: 2.0000 sec
PWI: 5.50 usec
IRNUC: 1H
CTEMP: -0.9 c
SLVNT: DMSO
EXREF: 0.00 ppm
BF: 0.50 Hz
RGAIN: 19



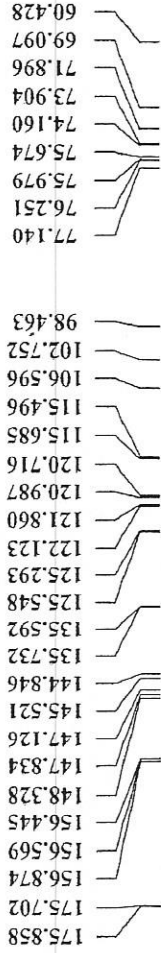


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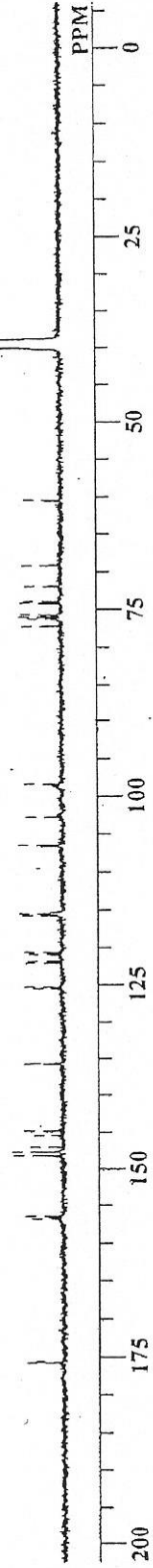
Catalog No.: G-002
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 Lot No.: 1412145



GSP 13C NMR DMSO-d6
 Analysed By : MSR



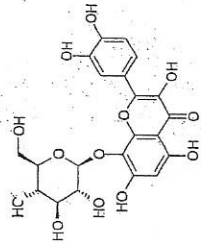
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 COMNT GSP-Final 5RC 13C NMR DMSO-d
 DATIM Sat Dec 06 06:01:19 2014
 OBNUC 13C
 EXMOD BCM
 OBFRQ 100.40 MHz
 OBSET 125.00 KHz
 OBFIN 10500.00 Hz
 POINT 32768
 FREQU 27118.64 Hz
 SCANS 512
 ACQTM 1.2083 sec
 PD 1.7920 sec
 PW1 7.50 usec
 IRNUC 1H
 CTEMP 21.0 c
 SLVNT DMSO
 EXREF 39.50 ppm
 BF 3.00 Hz
 RGAIN 24



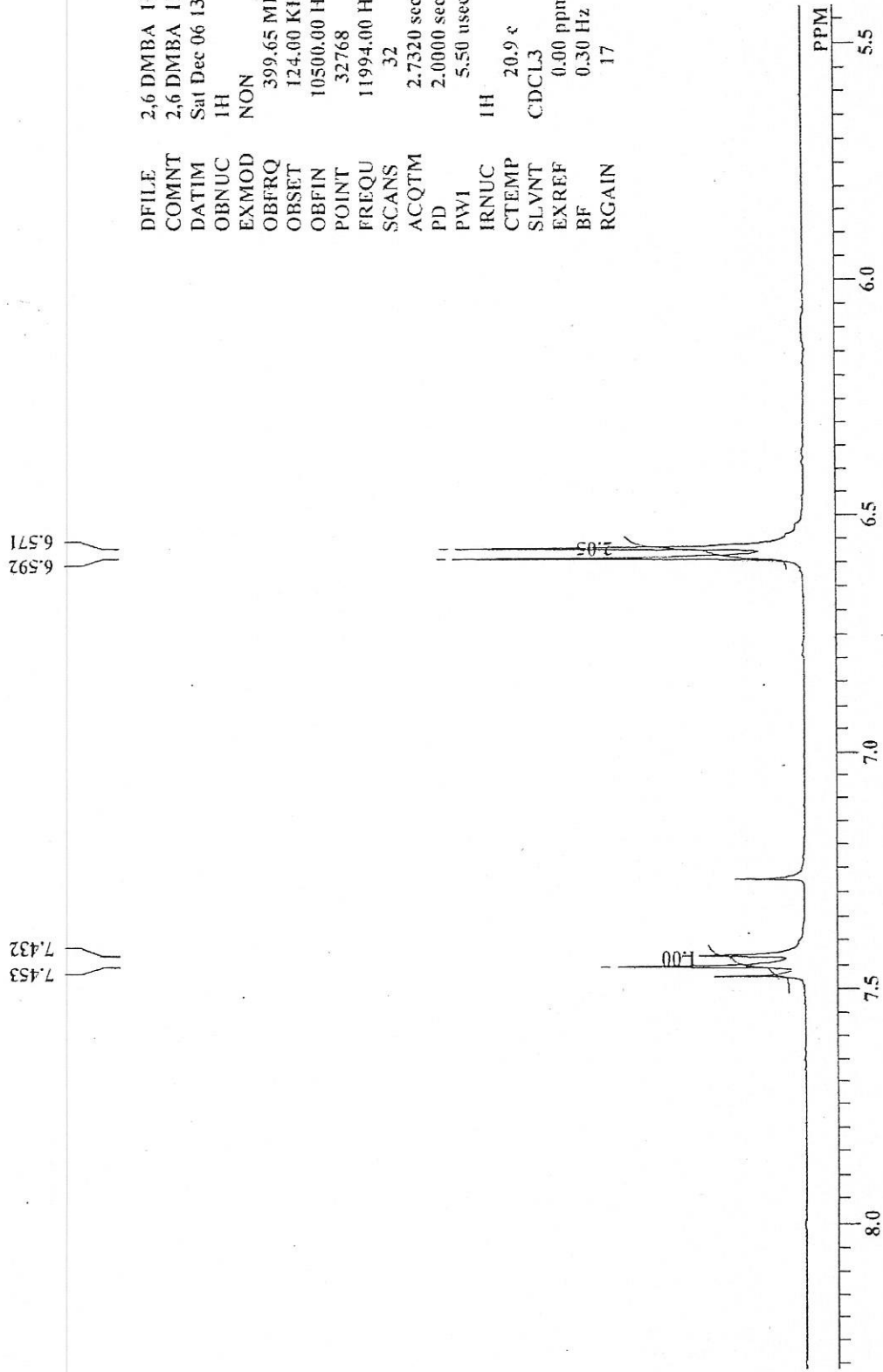


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2,6 DMBA 1H NMR CDC13
 Analysed By : MSR

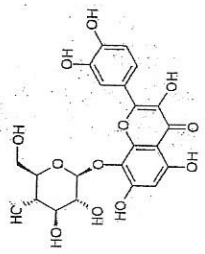


DFILE 2,6 DMBA 1H.als
 COMNT 2,6 DMBA 1H NMR CDC13
 DATIM Sat Dec 06 13:11:31 2014
 OBNUC 1H
 EXMOD NON
 OBFRQ 399.65 MHz
 OBSET 124.00 KHz
 OBFIN 10500.00 Hz
 POINT 32768
 FREQU 11994.00 Hz
 SCANS 32
 ACQTM 2.7320 sec
 PD 2.0000 sec
 PW1 5.50 usec
 IRNUC 1H
 CTEMP 20.9 c
 SLVNT CDCL3
 EXREF 0.00 ppm
 BF 0.30 Hz
 RGAIN 17



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Sample Information
Sample Name : GSP-FINAL
Batch No :
Data File : GSP-FINAL
Method File : Test1(ESI).lem
Acquired by : KKIran
Date Acquired : 05-12-2014 15:41:27

MS Spectrum Graph

Probe : ESI
Polarity:Pos

