



Appendix H: Coring Plan and Core Data

- Halliburton Sidewall Coring Report
 - Geolex Descriptions of Core Samples
 - Weatherford Laboratories Core Analysis Report
 - Weatherford Laboratories Core Photographs
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Engineer Tony
 Core Sheet TACKA M. 8 str. 103 well Ensign 828 Plot 5.003 Date 5-17-61
 Co. Name TACKA M. 8 str. 103 Mud Type Fresh water Mud Weight 8.6
 Depth 4340 4322 BHT 103 Lithology Limestone
 Visc. 40 no cores atm. no cores rec.
 no. cores req. 40 Tools Wt. 11
 Area: Lea County

Core No.	Depth	Length	Time	Core No.	Depth	Length	Time
Run#				Run#			
1	4826	.62	5 min	1	4350	MR	3 min
2	4810	.58	5 min	2	4370	Stuck	3 min
3	4790	.62	10 min	3	4384		
4	4770	.61	10 min	4			
5	4767	.58	10 min	5			
6	4750	.60	10 min	6			
7	4730	.62	10 min	7			
8	4710	.62	10 min	8			
9	4690	.52	10 min	9			
10	4670	.62	10 min	10			
11	4650	.60	10 min	11			
12	4510	.50	5 min	12			
13	4470	.50	5 min	13			
14	4290	.52	5 min	14			
15	4270	.60	5 min	15	4324	.58	5 min
16	4644	.62	15 min	16	4310	.60	5 min
17	4596	.52	5 min	17	4277	.45	5 min
18	4570	.62	5 min	18	4250	.46	5 min
19	4550	.60	5 min	19	4216	.56	5 min
20	4470	NIL	5 min	20	4195	.56	5 min
21	4470	NIL	3 min	21	4178	NIL	5 min
22	4457	.50	3 min	22	4075	MR	
23	4450	NIL	3 min	23			
24	4430	.62	3 min	24			
25	4410	.47	3 min	25			
26	4390	.58	3 min	26			
27	4387	.62	3 min	27			
28	4370	NIL	3 min	28			
29	4370	NIL	3 min	29			
30	4350	.62	3 min	30			

Stuck
 Out Hole
 7:00 PM

In Hole
 7:30 PM

TIME IN HOLE @ 11:00 AM BIT FULL IN @ 11:00 AM
 TOOL PRESS @ 50 BIT HIT WALL @ 11:00 AM
 LOW VOL PRESS @ 85 BIT FULL OUT @ 11:00 AM
 HIGH VOL PRESS @ 85 TIME OUT OF HOLE @ 11:00 AM

S.O. # 8116 32 03

Core Descriptions - Eunice Gas Plant SWD #1 well, Geolex, Inc. (DT Lescinsky)

Depth	Status	Geolex Sample	Description
4044	ND		no sample
4085	NR		no sample
4178	NR		no sample
4195	frag		gray-brown dolomite, with blotchy organic blobs, lots of pinholes and microporosity
4216	1/2		tan laminar dolomite, angular carbonate clasts, some elongate pinholes and microporosity
4250	fract		tan dolomite, fractures with dark black organic infilling, lots of pinholes and microporosity
4270	full		blotchy light gray and tan dolomite, microporosity
4277	1/2 fract		tan dolomite with angular, irregular fractures infilled with black organic material, lots of pinholes and microporosity
4290	full		tan dolomite with some laminae, vertical mineralized fracture, tan filling (not black)
4310	full		tan dolomite, irregular, thin vertical fracture with dark organic infilling, only pinhole and microporosity
4324	full		dark tan dolomite, black vuggy bodies, micro and pinhole porosity
4330	2/3		tan dolomite with black vuggy bodies, microporosity
4350	NR		no sample
4356	3/4		contact between light gray and tan dolomite, light gray similar to 4387 - some white angular carbonate clasts, tan similar to 4390, with black vuggy bodies
4370	NR		no sample
4387	pieces		light gray dolomite, fractured with black organic infilling, micro and some pinhole porosity
4390	1/2 frag		brown dolomite, irregular black organic vuggy, blob, many pinholes and microporosity
4410	1/2		brown dolomite, irregular fractures infilled with black organic material, micro and pinhole porosity
4430	frag	X	brown organic dolomite, porous, large pinholes - some elongate, part of sample poorly consolidated
4450	NR		no sample
4457	3/4		dark tan dolomite, vuggy with some white carbonate clasts, pinhole and microporosity
4470	NR		no sample
4490	3/4		dark brown dolomite, some laminae, large vertical fracture filled by dark organic carbonate?
4510	frag 2 pieces	X	similar to 4550, brown vuggy dolomite, vein/fracture with dark organic infilling, microporosity
4530	ND		no sample
4540	ND		no sample
4550	frag		brown vuggy dolomite, no secondary infilling, microporosity
4570	4/5		tan homogeneous dolomite with some light carbonate clasts, microporosity
4588	ND		no sample
4590	ND		no sample
4596	full		dark tan-gray dolomite with some laminae and white carbonate clasts, microporosity
4610	ND		no sample
4614	3/4	X	similar to 4650, some angular white carbonate clasts, small vugs and pinhole and microporosity
4630	ND		no sample
4650	full		tan dolostone with some small angular carbonate clasts, lots of pinhole and microporosity
4670	2 pieces		tan laminar dolomite with high angle, refilled (mineralized) fractures, some light clasts
4690	4 pieces		tan laminar dolomite, no carbonate bodies, pinhole and microporosity
4710	full		tan conglomeratic dolomite, gray clasts and small bodies, some pinhole porosity in matrix
4730	4 pieces	X	tan laminar dolomite with gray carbonate bodies and microporosity
4750	3/4		tan dolomite with some gray carbonate bodies, microporous with a few pinholes
4767	full		similar to 4770, tan dolomite, more pinhole porosity, no vugs apparent
4770	full		similar to 4826, tan dolomite large vug with gray infilling, pinhole and microporosity
4790	full		similar to 4810, tan dolomite with 10% gray rounded, carbonate pieces, some pinhole porosity
4810	2/3		tan dolomite, with 10% elongate white carbonate pieces, tight, microporosity
4826	full		tan dolomite, with vuggy gray infilled body, scattered pinhole porosity and microporosity



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ROTARY SIDEWALL CORE ANALYSIS REPORT

FOR

TARGA MIDSTREAM SERVICES, LP.

EUNICE GAS PLANT SWD # 1

LEA COUNTY, NEW MEXICO

TARGA MIDSTREAM SERVICES, LP.
EUNICE GAS PLANT SWD # 1
LEA COUNTY, NEW MEXICO
U.S.A.
File: MD-52142



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May 24, 2011

TARGA MIDSTREAM SERVICES, LP.
c/o CAMBRIAN MANAGEMENT
303 W. Wall Street, Suite 500
Midland, TX. 79701

Attn: W.A. BAKER

RE: EUNICE GAS PLANT SWD # 1
Rotary Sidewall Core Analysis

Mr. BAKER:

The core analysis data from the above referenced well is enclosed in the following pages.

All quality control data is enclosed in a separate section of the report. The data, results, and

digital images will be maintained in our files for your future reference. If you have any

questions regarding our results or procedures, please do not hesitate to contact us. We appreciate

the opportunity to analyze the core from the above referenced well and look forward to working with you

again in the future.

DISTRIBUTION

TARGA MIDSTREAM SERVICES, LP.
Attn: JAMES LINGNAU
6 Desta Drive, Suite 3300
Midland, TX. 79705
4 Copies of the Report 1 with Photographs and 1 CD-ROM

DAVID LESCINSKY
500 Marquette Avenue NW
Suite 1350
Albuquerque, NM. 87102
4 Copies of the Report and 1 CD-ROM

TARGA MIDSTREAM SERVICES, LP.
Attn: W.A. BAKER
303 W. Wall Street, Suite 500
Midland, TX. 79701
2 Copies of the Report and 1 CD-ROM

Sincerely,

Wayne Helms, General Manager
Weatherford Laboratories



TARGA MIDSTREAM SERVICES, LP.
EUNICE GAS PLANT SWD # 1
LEA COUNTY, NEW MEXICO
U.S.A.
File:MD-52142



CORE ANALYSIS PROCEDURES
FOR
TARGA MIDSTREAM SERVICES, LP.
EUNICE GAS PLANT SWD # 1
LEA COUNTY, NEW MEXICO

The Rotary Sidewalls were picked up by Weatherford Laboratories.

Gases from the Sidewalls were measured by Hot Wire Chromatography and reported in Gas Units.

A brief Lithological Description of the Sidewalls was recorded.

A description of the Fluorescence of the Sidewalls was recorded.

Ultraviolet Light Photographs were taken of the Sidewalls for a permanent record.

Natural Light Photographs were taken of the Sidewalls for a permanent record.

Composite Photographs of the Sidewall End Trims were taken under Natural and Ultraviolet Light.

The Sidewalls were extracted utilizing the Dean Stark method.

The fluids were measured by the Dean Stark method.

Porosities were measured in a Boyle's Law Porosimeter utilizing Helium.

Permeabilities were measured in a Hassler Sleeve Permeameter utilizing Nitrogen at 300 psi confining pressure.

Test samples of a known permeability were measured before and after the Sidewall permeabilities were measured.

TARGA MIDSTREAM SERVICES, LP.
EUNICE GAS PLANT SWD # 1
LEA COUNTY, NEW MEXICO
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LITHOLOGICAL ABBREVIATIONS

Anhydrite (-ic)	anhyd, anhyd	Filled	fd	Poor	pr
Anhydrite inclusion	A/I	Fine (-ly)	f, fnly	Pyrite	pyr
Bentonite (-ic)	bent	Fluorescence	flu	Quartz (-itic)	qtz
Black (-ish)	blk, blksh	Fossil (-iferous)	foss	Red	rd
Bleeding Oil	B/O	Fracture	frac	Round	rnd
Brecciated	brec	Fragments	frag	Residual Oil	So
Bright	brt	Friable	fri	Residual Water	Sw
Brittle	brit	Fusulinid	fus	Sample	Spl
Broken	brkn	Gilsonite	gil	Sandstone	Ss
Brown	brn	Gold	gld	Sandy	sdv
Buff	bf	Good	gd	Scattered	sc
Calcite (-ic)	calc, calctc	Grain (-s)	gr	Shaley	shy
Calcareous	calc	Granular	gran	Shale	sh
Carbonaceous	carb	Gray	gy	Shale parting	s/p
Cement	cmt	Gypsum	gyp	Silt (-y)	silt, slty
Chalk (-y)	chk, chky	Hair line(frac)	hl	Slight (-ly)	sli, s
Chert	cht	Halite	hal	Small	sml
Clay	cl	Inclusion	incl	Spotted (-y)	sp
Coal	c	Laminations (ated)	lam	Stringer	strgr
Coarse	crs	Large	lrg	Stylolite (-itic)	sty, styl
Conglomerate	cgl	Light	lt	Sucrosic	suc
Consolidated	consol	Limestone	ls	Sulphur	su
Contaminated	contam	Limey	lmy	Tan	tn
Crinoid (-al)	crin, crinal	Lithology	lith	Too broken	tbfa
Cross-bedded	x-bd	Medium	m	(for Analysis)	
Crystal (-line)	Xl, xln	Mineral Fluorescence	mf	Thin	thn
Dark	dk	Moderate	mod	Trace	Tr
Dense	dns	Mudcake	m/c	Very	v
Diameter	dia	No Show	N/S	Vertical	vert, vt
Dolomite (ic)	dol, dolm	Oolite (-itic)	ool	Vug (-gy)	vug
Dull	dl	Pale	pl		
Faint	fnt	Permeability	Perm, K		
Fair	fr	Pin-Point Porosity	ppp		

ROTARY SIDEWALL CORE ANALYSIS



LABORATORIES

TARGA MIDSTREAM SERVICES, LP
EUNICE GAS PLANT SWD NO. 1
LEA COUNTY, NEW MEXICO

A.P.I. NUMBER : 30-025-21497

FIELD : SWD; San Andres

LOCATION: 2580' FSL, 1200' FWL,

Section 27, T-22-S, R-37-E

FILE NO.: MD-52142

DATE : May 20, 2011

ANALYSTS : WH, SB, JR

DEAN STARK EXTRACTION

SAMPLE NO.	DEPTH ft	GRAIN DENSITY	POR %	PERM mD	SATURATIONS		GAS UNITS	FLUORESCENCE %	LITHOLOGY
					Sw	So			

1	4195.0	2.80	38.8	tbfa	37.4	25.1	322	60		Dol tn-brn-gy sslyt abd ppp-sml vug lrg gyp incl lrg slty incl
2	4216.0	2.85	3.3	0.008	50.1	Tr	46	10		Dol tn-brn-gy sslyt tr ppp-sml vug
3	4250.0	2.83	10.8	tbfa	33.7	19.5	301	70		Dol tn-brn-gy sslyt sc ppp-sml vug slty lam frac
4	4270.0	2.90	4.5	0.098	94.4	0.0	2	0		Dol tn-gy sslyt abd lrg anhy-gyp incl
5	4277.0	2.83	8.0	0.022	61.7	Tr	28	Tr		Dol tn-brn sslyt tr ppp-sml vug sc sml gyp incl gyp fd frac
6	4290.0	2.80	8.3	0.057	51.9	Tr	67	10		Dol tn-brn sslyt sc ppp-sml vug sc sml A/I abd slty intrbd
7	4310.0	2.82	8.0	0.047	45.7	9.6	51	30		Dol tn-brn sslyt sc ppp-sml vug sc slty intrbd sty
8	4324.0	2.84	4.4	0.023	42.4	Tr	10	0		Dol tn-brn-gy sslyt sc ppp-vug
9	4330.0	2.81	16.5	9.549	21.9	18.1	216	80		Dol tn-brn-gy sslyt sc ppp-vug sc sml anhy-gyp incl
10	4356.0	2.72	14.9	0.067	51.6	14.2	111	60		Dol tn-brn sslyt abd ppp-sml vug lrg cht incl
11	4387.0	2.63	17.1	tbfa	59.7	0.0	71	0		Cht crm-tn-whit trip slty lam
12	4390.0	2.82	8.0	tbfa	34.1	13.2	12	50		Dol tn-brn-gy sslyt ssdy sc ppp-sml vug sc frac
13	4410.0	2.82	3.5	tbfa	25.8	10.0	15	30		Dol brn-gy sslyt sc ppp-sml vug sc frac
14	4430.0	2.83	4.9	tbfa	38.0	11.0	7	20		Dol brn-gy sslyt sc ppp-sml vug sc sml anhy-gyp incl frac
15	4457.0	2.81	8.2	1.336	21.9	17.0	28	60		Dol tn-brn-gy sslyt ssdy sc ppp-sml vug
16	4490.0	2.64	5.5	0.521	38.3	12.1	72	30		Dol tn-brn-gy sslyt ssdy sc ppp-sml vug sh lam
17	4510.0	2.80	12.4	tbfa	23.6	20.6	13	80		Dol brn sslyt suc i/p abd ppp-sml vug frac
18	4550.0	2.77	16.9	tbfa	25.5	18.3	17	70		Dol brn sslyt suc i/p abd ppp-sml vug frac
19	4570.0	2.76	8.2	0.060	95.6	Tr	3	Tr		Dol tn-brn sslyt ssdy sc sml A/I abd gyp incl
20	4596.0	2.80	5.0	0.049	90.8	0.0	1	0		Dol tn-brn sslyt ssdy sc sml gyp incl

ROTARY SIDEWALL CORE ANALYSIS

Weatherford®

LABORATORIES

TARGA MIDSTREAM SERVICES, LP
EUNICE GAS PLANT SWD NO. 1
LEA COUNTY, NEW MEXICO

A.P.I. NUMBER : 30-025-21497

FIELD : SWD, San Andres

LOCATION: 2580' FSL, 1200' FWL,

Section 27, T-22-S, R-37-E

FILE NO. : MD-52142

DATE : May 20, 2011

ANALYSTS : WH, SB, JR

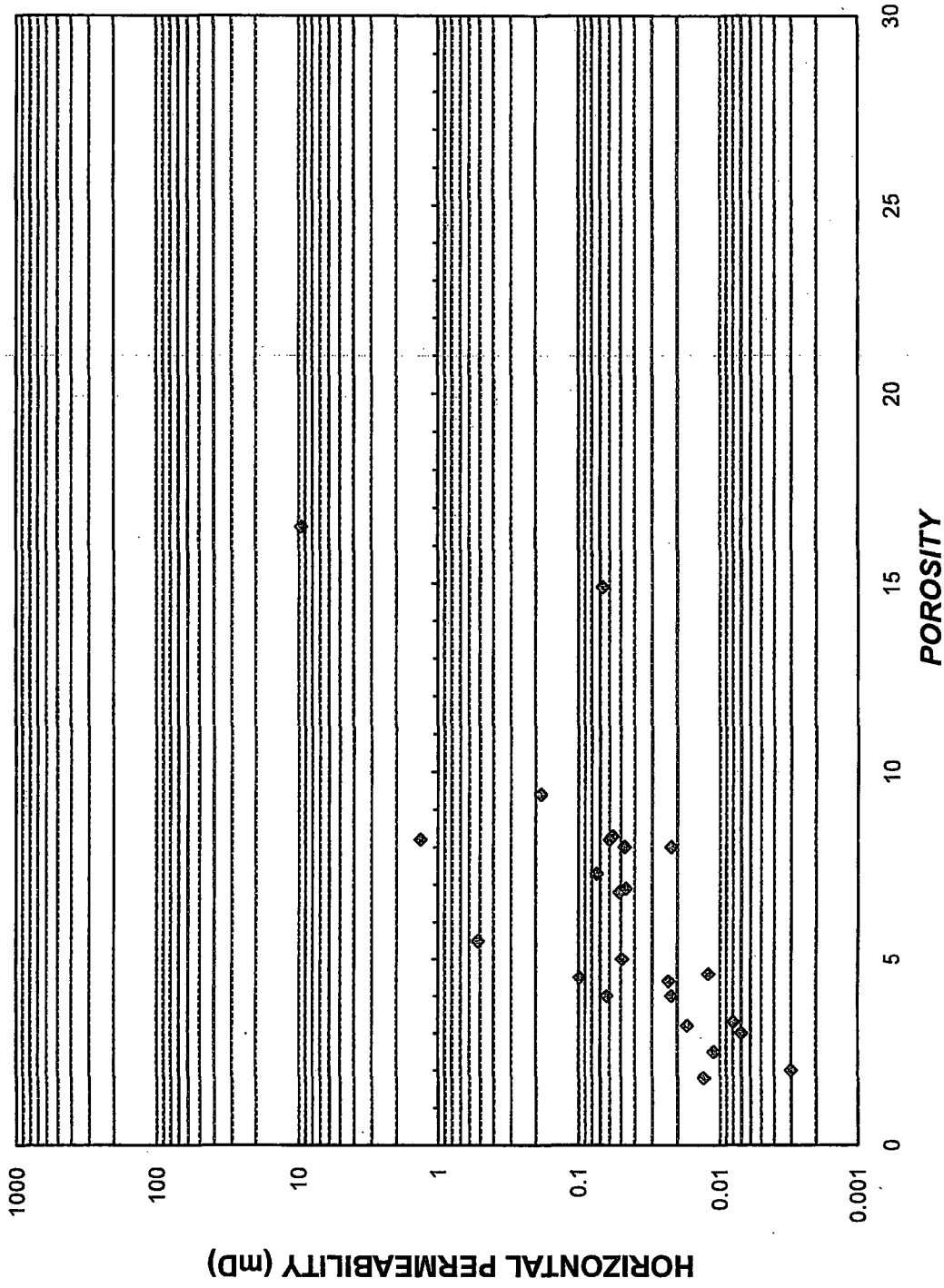
DEAN STARK EXTRACTION

SAMPLE NO.	DEPTH ft	GRAIN DENSITY	POR %	PERM mD	SATURATIONS		GAS UNITS	FLUORESCENCE		LITHOLOGY
					Sw	So		%	%	
21	4614.0	2.84	4.6	0.012	47.6	0.0	0	0	0	Dol tn-brn ssly sc ppp-sml vug sc anhy-gyp incl
22	4650.0	2.81	1.8	0.013	47.2	0.0	0	0	0	Dol tn-brn ssly sc ppp-sml vug sc gyp incl fd frac
23	4670.0	2.73	4.0	0.022	53.3	0.0	0	0	0	Dol tn-brn ssly ssdy sc sml anhy-gyp incl sc slty intrbd
24	4690.0	2.84	3.0	0.007	41.4	0.0	0	0	0	Dol tn-brn ssly sc ppp-sml vug sc sml A/I
25	4710.0	2.82	2.5	0.011	84.5	0.0	0	0	0	Dol tn-brn ssly tr ppp-sml vug sc sml anhy-gyp incl lrg A/I
26	4730.0	2.84	6.8	0.051	70.6	0.0	0	0	0	Dol tn-brn ssly tr ppp-sml vug abd sml gyp incl
27	4750.0	2.84	6.9	0.046	76.0	0.0	0	0	0	Dol tn-brn ssly tr ppp-sml vug sc sml anhy-gyp incl
28	4767.0	2.82	3.2	0.017	50.4	0.0	0	0	0	Dol tn-brn ssly sc ppp-sml vug sc sml anhy-gyp incl
29	4770.0	2.78	9.4	0.184	98.1	0.0	0	0	0	Dol tn-brn ssly abd sml gyp incl
30	4790.0	2.84	4.0	0.063	54.0	0.0	0	0	0	Dol tn-brn ssly sc ppp-sml vug sc sml anhy-gyp incl
31	4810.0	2.84	2.0	0.003	46.0	0.0	0	0	0	Dol brn ssly abd anhy fd foss
32	4826.0	2.80	7.3	0.074	96.6	0.0	0	0	0	Dol tn-brn ssly sc ppp-sml vug abd gyp incl



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TARGA MIDSTREAM SERVICES, LP
EUNICE GAS PLANT SWD # 1





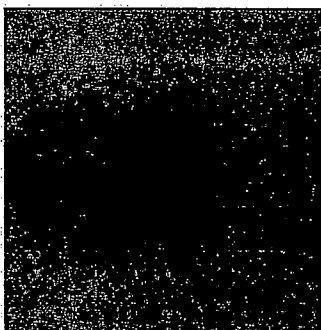
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EUNICE GAS PLANT SWD NO. 1
5/25/2011

QUALITY CONTROL RERUN DATA

Sample No.	GRAIN DENSITY		POROSITY		<i>k</i> standard Test Sample	PERMEABILITY	
	original	reruns	original	reruns		original	reruns
1	2.801	2.800	38.81	38.78			
5	2.826	2.826	7.98	8.01	2.619	0.022	0.021
9	2.811	2.813	16.47	16.52		9.549	9.559
10	2.723	2.722	14.87	14.83		0.067	0.063
15	2.810	2.812	8.24	8.30		1.336	1.266
19	2.762	2.760	8.22	8.15		0.060	0.059
25	2.824	2.823	2.49	2.45		0.011	0.010
29	2.782	2.783	9.41	9.43		0.184	0.173
31	2.842	2.844	1.96	2.01	2.611	0.003	0.002



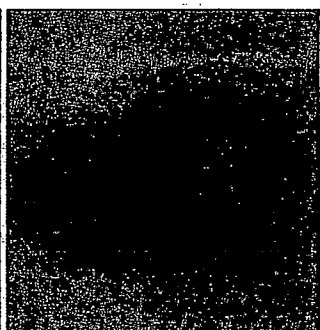
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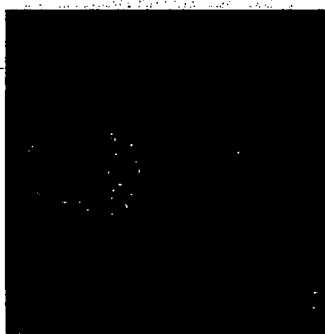
4195.0 WL



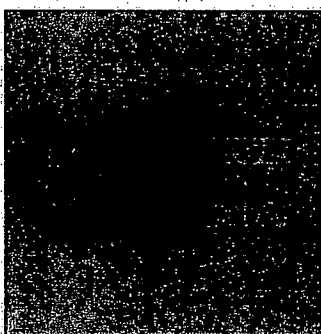
4216.0 UV



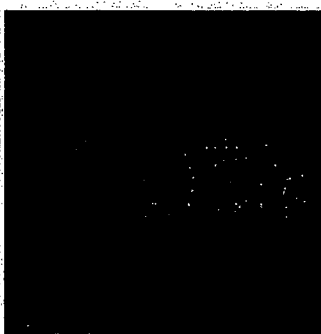
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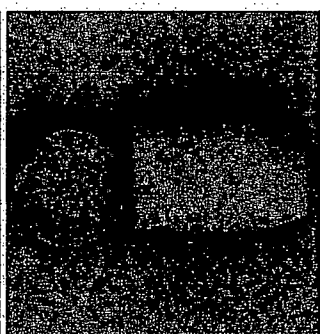
4250.0 UV



4250.0 WL



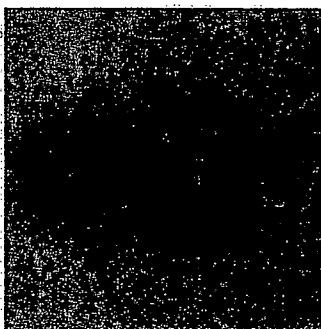
4270.0 UV



4270.0 WL



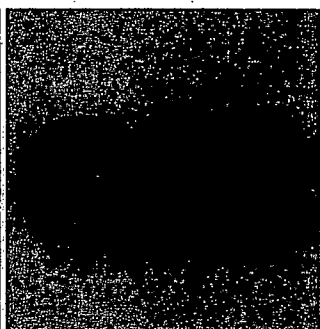
4277.0 UV



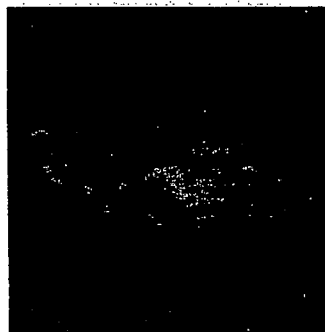
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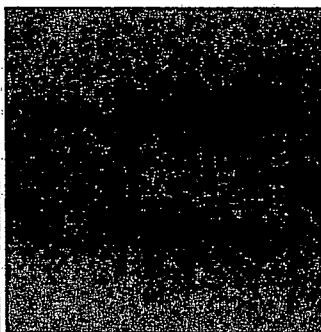
4290.0 UV



4290.0 WL



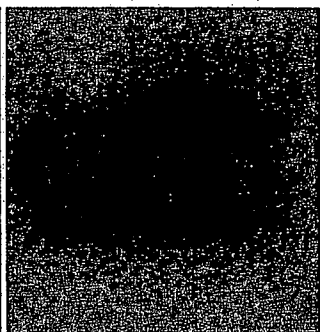
4310.0 UV



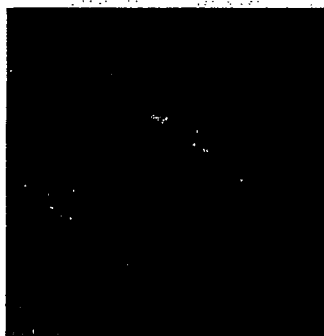
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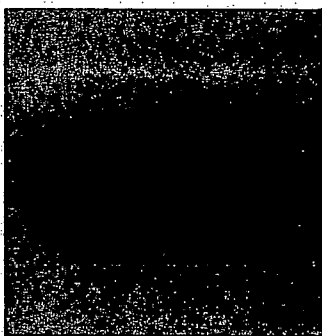
4324.0 UV



4324.0 WL



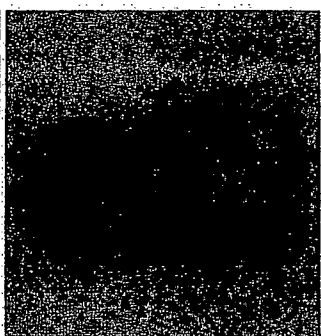
4330.0 UV



4330.0 WL



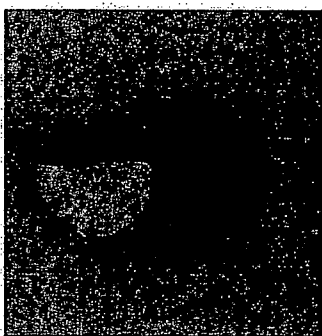
4356.0 UV



4356.0 WL



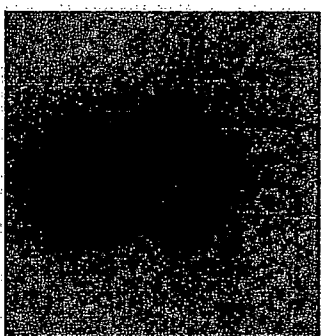
4387.0 UV



4387.0 WL



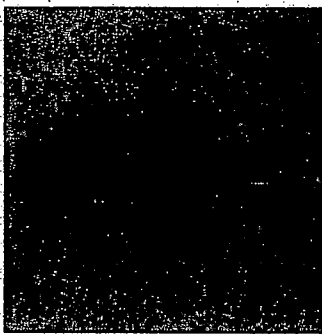
4390.0 UV



4390.0 WL



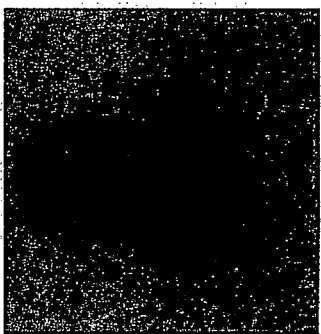
4410.0 UV



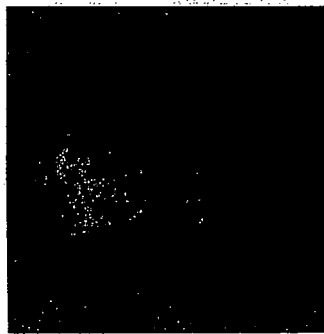
4410.0 WL



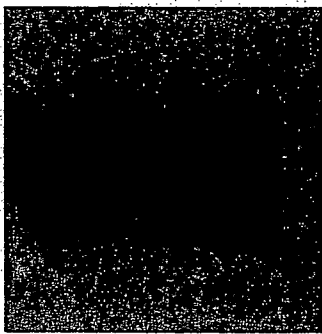
4430.0 UV



4430.0 WL



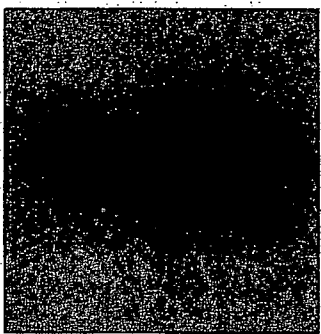
4457.0 UV



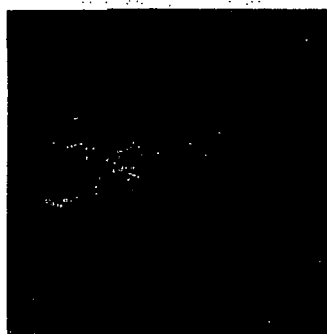
4457.0 WL



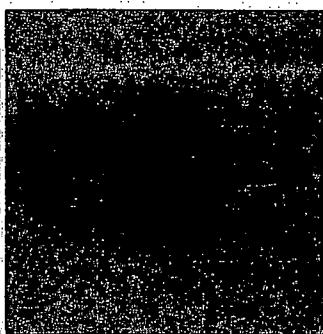
4490.0 UV



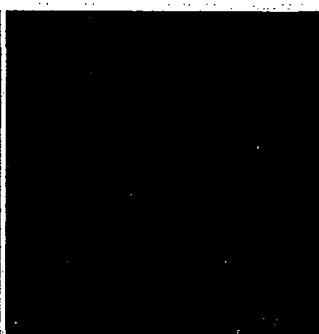
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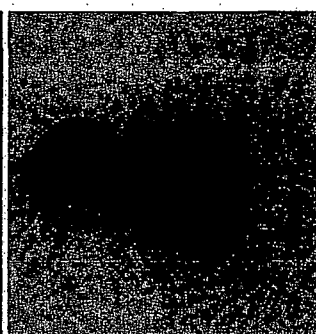
4510.0 UV



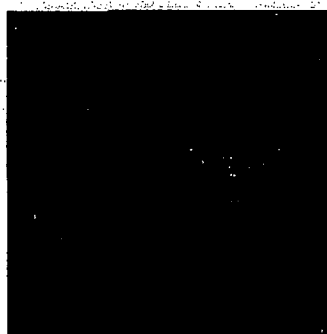
4510.0 WL



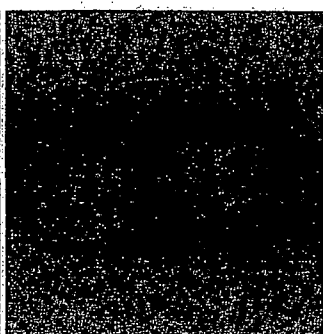
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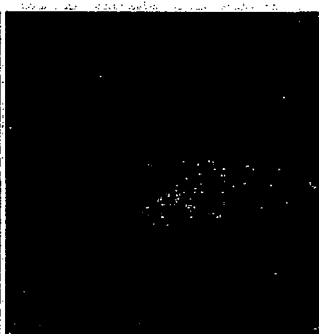
4550.0 WL



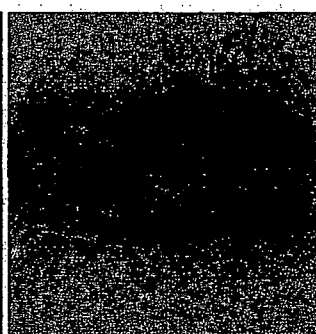
4570.0 UV



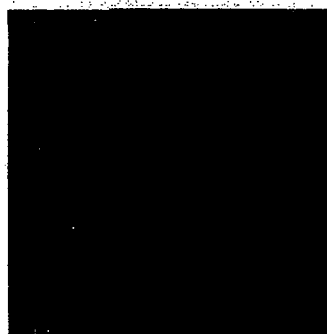
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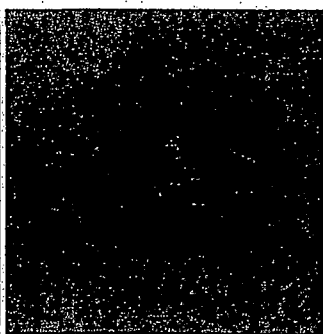
4596.0 UV



4596.0 WL



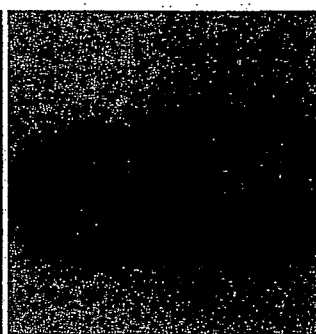
4614.0 UV



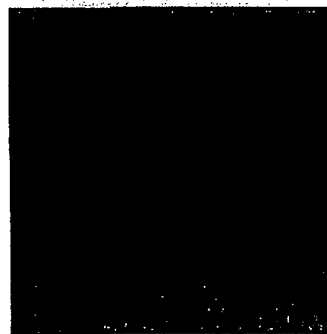
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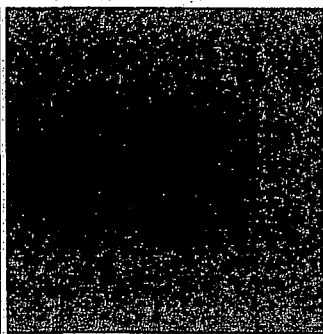
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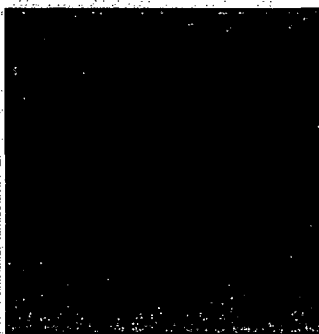
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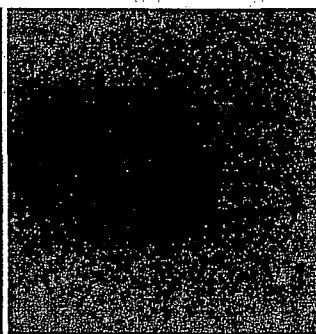
4670.0 UV



4670.0 WL



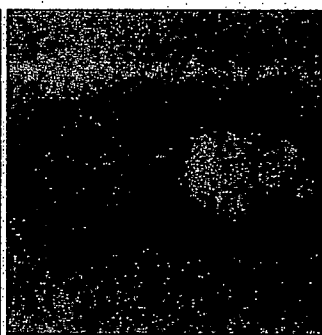
4690.0 UV



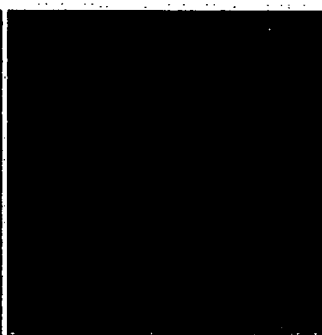
4690.0 WL



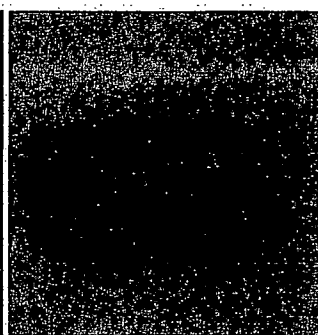
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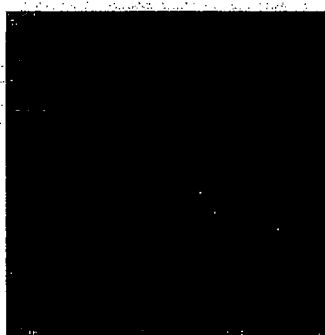
4710.0 WL



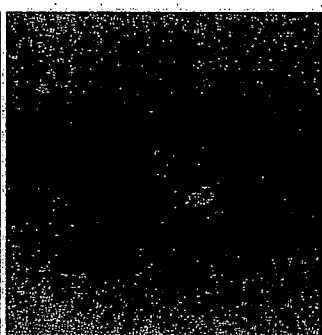
4730.0 UV



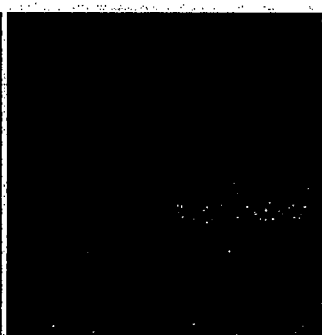
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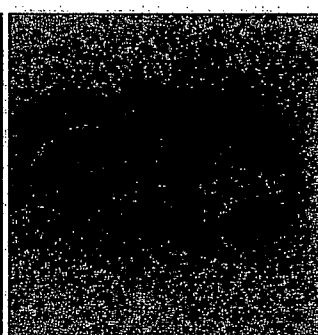
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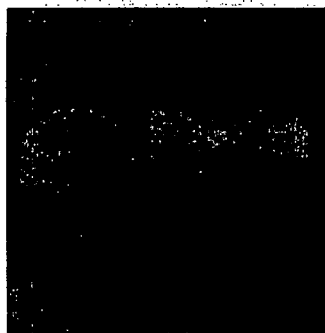
4750.0 WL



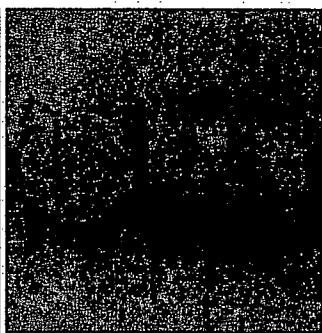
4767.0 UV



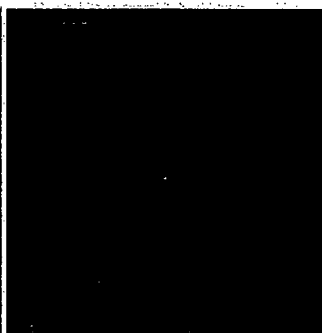
4767.0 WL



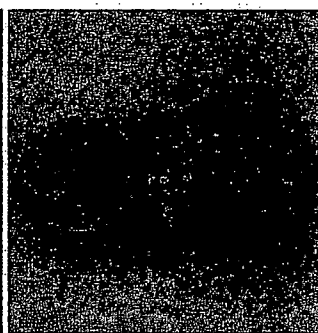
4770.0 UV



4770.0 WL



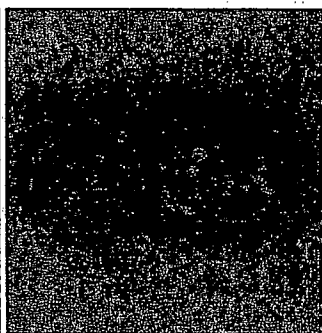
4790.0 UV



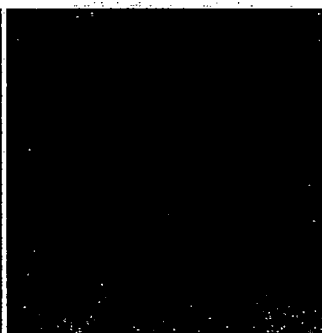
4790.0 WL



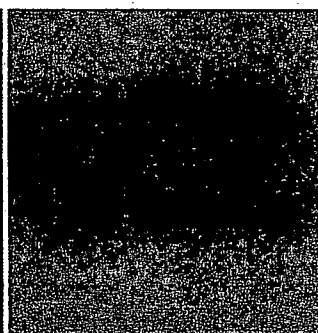
4810.0 UV



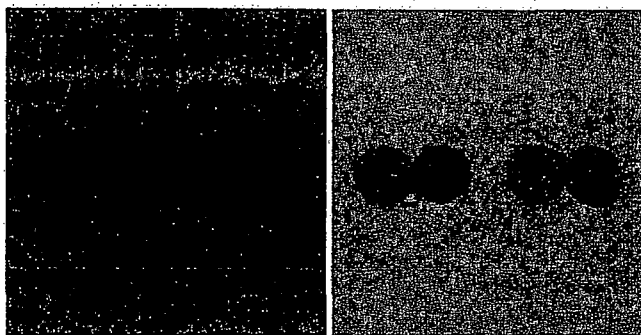
4810.0 WL



4826.0 UV



4826.0 WL



Comp UV

Comp WL