Object	Date	Time	Seeing	Filters	Opacity	Location	Equipment	Description
Required O	bjects to Obser	ve						
						Keota, CO -		A nice dark swath of sky separating 2 arms of
						Moderately Dark		Milky Way. Goes from tip of Cygnus past
Great Rift	8/10/2010	9:29 PM	Good	None	3-5	Sky.	NE	Ophiuchus. Opacity 3-5.
								32mm. B142 is to the right of B 143 and 1/2 FOV
								away. It too is 3/4 FOV high and is fatter at top
								than at bottom. Very bright field star on bottom
			_			Fox Park, WY.		of B142. Very few field stars on either void and
B 142	7/21/2008	1:27 AM	Great	None	3	Very dark skies.	12.5" f/8 Newtonian	both are obvious.
								32mm. B143 forms a "U" with prongs going up
						Fox Doule M/V		and rhs B143 fatter than lhs. Not many stars on
B143	7/21/2008	1:27 AM	Great	None	3	Fox Park, WY. Very dark skies.	12.5" f/8 Newtonian	this void in star rich field. Its 3/4 FOV high and fills FOV nicely.
D143	7/21/2008	1.27 AIVI	Great	None	3	Okie-Tex Star	12.5 I/o Newtonian	FOV filcely.
						Party. Kenton,		
						OK. Very dark		20x80 Binocs – A larger area, boxy, void of right
B 34	9/25/2011	2:45 AM	Fair	None	3	skies.	20x80 Binoculars	stars. See a few very faint stars on void.
_			-					A medium sized oval area with this should be. Lots
						Fox Park, WY.		of faint stars on void but not as many as
B 160	7/29/2011	12:09 AM	Good	None	2 or 3	Very dark skies.	20x80 Binoculars	surrounding the void.
								A small, darker oval area bounded by 4 brighter
						Fox Park, WY.		stars in a rhombus shape. Couple of faint stars
B 161	7/29/2011	12:05 AM	Good	None	4 or 5	Very dark skies.	20x80 Binoculars	seen on void.
						Fox Park, WY.		A darker rectangular shaped area bonded by a line
B 171	7/29/2011	12:01 AM	Good	None	3 or 4	Very dark skies.	20x80 Binoculars	of bright stars around rectangle edge.
						Fox Doule M/V		32mm – An area that is void of lots of stars, yet
В 365	7/20/2011	12:21 AM	Good	None	3	Fox Park, WY. Very dark skies.	12.5" f/8 Newtonian	there are many stars on void. Bounded by much brighter stars. Fills FOV nicely.
Б 303	7/29/2011	12.Z1 AIVI	Good	None	3	very dark skies.	12.5 I/o Newtonian	brighter stars. Fills FOV flicely.
								55mm – A noticeable thick dark ring. Has few stars
						Fox Park, WY.		in void and has a tail that comes off the lower
B 144	7/29/2011	10:50 PM	Great	None	1 or 2	Very dark skies.	12.5" f/8 Newtonian	right side that is the same thickness.
	, ,					,	·	
						Fox Park, WY.		55mm – A small oval void of stars in a very star
B 145	7/29/2011	10:53 PM	Great	None	5 or 6	Very dark skies.	12.5" f/8 Newtonian	rich field.
								32mm – A long, fat void approx 3-4 FOVs long,
								snakes up and down as I pan to right and then
D4.60	7/20/201	44 20 71				Fox Park, WY.	40 Ell (/0.1)	opens up to a much larger void on right had side.
B168	7/29/2011	11:29 PM	Great	None	5 or 6	Very dark skies.	12.5" f/8 Newtonian	Some stars on void here and there.
						Fox Park, WY.		32mm – A fat chevron shaped void pointing to
В 352	7/29/2011	11:23 PM	Great	None	3 or 4	Very dark skies.	12.5" f/8 Newtonian	upper left. Some stars in void.
ט טטע	1/23/2011	11.23 PIVI	Great	None	3014	very uark skies.	12.3 I/O NEWLUIIIdli	upper lett. Joine stars in volu.

	<u> </u>				1	1		T
						Fox Park, WY.		32mm – A large circular void with lots of stars on
B 353	7/29/2011	11:38 PM	Great	None	1 or 2	Very dark skies.	12.5" f/8 Newtonian	void but not as many as surround star rich field.
D 064	7/20/2044	44.25.044				Fox Park, WY.	42 Ell (/0.b)	32mm – An oval shaped dark area void of stars.
B 361	7/29/2011	11:25 PM	Great	None	4 or 5	Very dark skies.	12.5" f/8 Newtonian	Bounded by star rich field stars.
						Fox Park, WY.		A nice, dark lane that has a dog leg kink in it. Easy
LDN 935	7/28/2011	11:56 PM	Good	None	4 or 5	Very dark skies.	20x80 Binoculars	to see in FOV. Dark, Few stars on void.
	1,10,1011					l con y diam to mice.	ZONGO ZIII GOGIGIO	Large dark area north of Deneb down Milky Way.
						Fox Park, WY.		Like northern coalsack. Has some stars in void but
LG3	7/28/2011	11:48 PM	Good	None	4	Very dark skies.	NE	not like Milky Way near it.
Northern						Fox Park, WY.		A very large, dark patch with some stars seen on
Coalsack	7/28/2011	11:46 PM	Good	None	4	Very dark skies.	NE	void.
						Okie-Tex Star		
						Party. Kenton,		A kidney bean shaped area with many stars in this
	0/26/2011	4.05.444	0 1			OK. Very dark	20.00 8:	area. Bounded by a star rich area of winter Milky
B 37	9/26/2011	4:25 AM	Good	None	3	skies.	20x80 Binoculars	Way. Lots of stars outside area.
						Fox Park, WY.		
B 44	7/28/2011	9:58 PM	ОК	None	2	Very dark skies.	20x80 Binoculars	Nice. Long area void of stars.
<u> </u>	7/20/2011	3.30 1 141	<u> </u>	None		very dark skies.	20x00 Billocalars	32mm – M9 is awesome. To left and in same FOV
						Fox Park, WY.		is this larger area of darkness in a very star rich
B 64	7/28/2011	10:16 PM	ОК	None	2 or 3	Very dark skies.	12.5" f/8 Newtonian	area. Has a few stars on void.
						Fox Park, WY.		Fills FOV nicely. Very dark and has a couple of
В 78	7/28/2011	10:07 PM	Good	None	4 or 5	Very dark skies.	20x80 Binoculars	stars in void. For most part, starless.
								A long, narrow dark area bounded by bright stars.
						Fox Park, WY.		Left to right in FOV and 1.5 FOVs long. Few faint
Stem	7/28/2011	10:04 PM	OK	None	3	Very dark skies.	20x80 Binoculars	stars seen on void.
						Okie-Tex Star		
						Party. Kenton,		
	0/25/2011	2.57 444	Fa:-	None	_	OK. Very dark	12 Ell f/O Novetonian	32mm – A long dar void that hooks into M42 and
Fish's Mouth	9/25/2011	2:57 AM	Fair	None	5	skies. Okie-Tex Star	12.5" f/8 Newtonian	heads towards the trapezium.
						Party. Kenton,		15mm - Bisceting the flame nebula is this darker
						OK. Very dark		area. Can see tentacles coming off right side into
Flame	9/26/2011	3:38 AM	Fair	None	4 or 5	skies.	12.5" f/8 Newtonian	nebula.
	3, 20, 2011	3.337	. 311		. 3. 3		22.0 .70	
						Fox Park, WY.		A narrow, chevron looking dark patch west of M6.
В 275	7/28/2011	10:01 PM	OK	None	3 or 4	Very dark skies.	20x80 Binoculars	Couple of faint stars seen in void.
						Fox Park, WY.		A triangular darker area in amongst stars with
B 103	7/28/2011	11:39 PM	Good	None	2 or 3	Very dark skies.	20x80 Binoculars	more stars on void. Bounded by Milky Way stars.

				l		<u> </u>		A large, darker area above the open cluster M11.
						Fox Park, WY.		There are stars on void but void bounded by tons
B 111	7/28/2011	11:24 PM	Good	None	2	Very dark skies.	20x80 Binoculars	of Milky Way stars.
								To right of B111. A long, large, slender dark area
						Fox Park, WY.		bounded by Milky Way stars with some stars on
B 119a	7/28/2011	11:24 PM	Good	None	2 or 3	Very dark skies.	20x80 Binoculars	void.
						Keota, CO -		
						Moderately Dark		134x - A set of dust lanes that divide M20 into 3
B 85	8/10/2010	22:10	Great	None	4	Sky.	12.5" f/8 Newtonian	pieces. Very subtle yet easy to see.
						FL Do to TV		A constitution of a standard Addition May and a finite of
D 06	F /4.2 /2.04.0	4.22	Const	Nama	_	Ft. Davis, TX -	2000 Pin lana	A small area of a star rich Milky Way void of stars.
В 86	5/12/2010	4:22	Great	None	5	Dark Skies	20x80 Binoculars	
								32mm – In same FOV as B93, B92 is more vertical
								linear shaped and not as dark as B93. Has less
						Fox Park, WY.		boundary definition. Could see both B92 and B93
B 92	7/28/2011	10:33 PM	ОК	None	5	Very dark skies.	12.5" f/8 Newtonian	in 20x80 binocs at top of M24.
	1,10,1011	20.00				Tory dark on con		III Zones sinoss ac top or III II
						Fox Park, WY.		32mm – This is a dark, round area with a couple of
В 93	7/28/2011	10:33 PM	ОК	None	6	Very dark skies.	12.5" f/8 Newtonian	stars on void.
								32mm – A darker area above and to the right of
						Fox Park, WY.		the heart of M8. Brighter nebulosity surrounds
Lagoon	7/28/2011	10:39 PM	OK	None	3	Very dark skies.	12.5" f/8 Newtonian	this. Small. Has few stars on void.
						Fox Park, WY.		32mm – A small, dark oval void of stars with
Swan's Neck	7/28/2011	11:44 PM	OK	None	5 or 6	Very dark skies.	12.5" f/8 Newtonian	nebulosity over it forming swan's neck. Very dark.
						Okie-Tex Star		
						Party. Kenton,		
D 22	0/25/2011	2.52 414	Fa:-	None	_	OK. Very dark	20v00 Din a cula va	A larger area yield of but a counter of faint stars
B 22 Optional Obje	9/25/2011	2:53 AM	Fair	None	3	skies.	20x80 Binoculars	A larger area void of but a couple of faint stars.
Optional Obje		ve I I						1
						Fox Park, WY.		32mm – Very small. Subtle darkening of bright
B88	7/28/2011	10:39 PM	ОК	None	2	Very dark skies.	12.5" f/8 Newtonian	nebula glow above M8.
	772072011	20.03 1 111	<u> </u>	Hone		very dark skiesi	1213 170 110 110 1110 111	Incoming State and the Inter-
						Fox Park, WY.		32mm – Very small. Subtle darkening of bright
B89	7/28/2011	10:39 PM	OK	None	2	Very dark skies.	12.5" f/8 Newtonian	nebula glow above M8.
						·		
						Fox Park, WY.		A large area, easily seen in FOV that is void of all
Be 157	7/28/2011	10:51 PM	OK	None	3 or 4	Very dark skies.	20x80 Binoculars	stars. Circular in shape.
						Fox Park, WY.		32mm – A kidney bean shaped void with brighter
B50	7/29/2011	9:59 PM	Great	None	5	Very dark skies.	12.5" f/8 Newtonian	stars bounding void. No stars on void.
DOO	7/20/2044	40.20 554	Constal	Nicos		Fox Park, WY.	42 Ell f/O M	32mm – Small dark patch, void of stars in a star
B90	7/29/2011	10:29 PM	Great	None	6	Very dark skies.	12.5" f/8 Newtonian	rich area.

					Ī			
						Fox Park, WY.		32mm – An oval patch void of stars. Not as dark as
B303	7/29/2011	10:32 PM	Great	None	4	Very dark skies.	12.5" f/8 Newtonian	last 2 I've seen.
						Fox Park, WY.		32mm – A larger oval area bounded by a ring of
B84	7/29/2011	10:43 PM	Great	None	5	Very dark skies.	12.5" f/8 Newtonian	brighter stars. No stars seen in void.
	1,13,131	201101111	<u> </u>	110110		i di y dan kamada		32mm – Above B84 and in same FOV is this shield
						Fox Park, WY.		shaped void outlined with very faint stars on
B83a	7/29/2011	10:43 PM	Great	None	5	Very dark skies.	12.5" f/8 Newtonian	bottom that forms the shield look.
								32mm – A roughly arrow head shaped void
						Fox Park, WY.		bounded by a line of brighter stars. Some faint
B164	7/29/2011	11:43 PM	Great	None	4 or 5	Very dark skies.	12.5" f/8 Newtonian	stars on void on right hand side.
								32mm – Roughly a thick arrow pointing to lower
								left. Has a line of 4 evenly spaced stars down the
						Fox Park, WY.		middle of the arrow. Otherwise, void of stars. Fills
B362	7/29/2011	11:51 PM	Great	None	5	Very dark skies.	12.5" f/8 Newtonian	FOV nicely.
						Fox Dorle M/V		22mm Doughly circular with some stars soon on
B343	7/29/2011	11:54 PM	Great	None	2 or 3	Fox Park, WY.	12.5" f/8 Newtonian	32mm – Roughly circular with some stars seen on void.
B343	7/29/2011	11:54 PIVI	Great	None	2013	Very dark skies.	12.5 1/8 Newtonian	A circular area with some stars on void. Centered
						Fox Park, WY.		on Gamma Cygnus. Surround void is star rich
LDN 889	7/29/2011	11:56 PM	Great	None	3	Very dark skies.	20x80 Binoculars	Milky Way area.
22.1.003	7,23,2011	11.501111	Great	110116		very dark skiesi	20x00 Billocalars	Trimity tray area.
						Fox Park, WY.		32mm – A round void to upper right of a bright
B334	7/30/2011	12:05 AM	Great	None	3 or 4	Very dark skies.	12.5" f/8 Newtonian	star with some stars in void.
								32mm – Above B334 are 2 longer, linear patches
						Fox Park, WY.		B336 and B337. Very similar to each other with
B336	7/30/2011	12:05 AM	Great	None	3 or 4	Very dark skies.	12.5" f/8 Newtonian	some stars on void.
								32mm – Above B334 are 2 longer, linear patches
						Fox Park, WY.		B336 and B337. Very similar to each other with
B337	7/30/2011	12:05 AM	Great	None	3 or 4	Very dark skies.	12.5" f/8 Newtonian	some stars on void.
								32mm – A fat Y shaped void. Y opens to left. Some
						F. D. J. MAY		stars on void and void bounded by line of brighter
חממר	7/20/2011	12.00 414	Cuant	Nama	1 0 4 5	Fox Park, WY.	12 Ell f/O Novetonion	stars. In lower right part, void bisected by arc chain of faint stars, very close to each other.
B335	7/30/2011	12:08 AM	Great	None	4 or 5	Very dark skies.	12.5" f/8 Newtonian	chain of faint stars, very close to each other.
						Fox Park, WY.		A large void with some stars seen on void. Fills
B137	7/30/2011	12:10 AM	Great	None	2	Very dark skies.	20x80 Binoculars	FOV nicely.
= = • ·	,,33,2011	12.1371111	<u> </u>	1,0110		10.7 00.11 01.1001	20,000 51110001013	
								A larger, dark area approx 2 FOV in size and
						Fox Park, WY.		somewhat linear from left to right in FOV. Some
LDN 617	7/30/2011	12:12 AM	Great	None	4 or 5	Very dark skies.	20x80 Binoculars	brighter field stars seen on void. Pretty dark.
						Fox Park, WY.		A long void with some stars seen on void. Approx
LDN 582	7/30/2011	12:14 AM	Great	None	4 or 5	Very dark skies.	20x80 Binoculars	1 FOV wide and a little over 1 FOV in length.

LDN 557	7/30/2011	12:15 AM	Great	None	5	Fox Park, WY. Very dark skies.	20x80 Binoculars	Fills FOV nicely. A dark void with few stars seen on void.
B139	7/30/2011	12:18 AM	Great	None	5 or 6	Fox Park, WY. Very dark skies.	12.5" f/8 Newtonian	32mm – A small boxy void with no stars on void.
B135	7/30/2011	12:21 AM	Great	None	4	Fox Park, WY. Very dark skies.	20x80 Binoculars	A larger void. Fills center of FOV nicely. Few stars seen on void.
B132	7/30/2011	12:27 AM	Great	None	5	Fox Park, WY. Very dark skies.	12.5" f/8 Newtonian	32mm – A roundish void with 1 bright star in center.
						Fox Park, WY.		
B127	7/30/2011	12:28 AM	Great	None	5 or 6	Very dark skies.  Fox Park, WY.	12.5" f/8 Newtonian	32mm - A small round void circled by 8 faint stars.  32mm - Below B127 is this long, fat, hot dog
B129	7/30/2011	12:28 AM	Great	None	5 or 6	Very dark skies.  Fox Park, WY.	12.5" f/8 Newtonian	shaped void with no stars seen in void.
B104	7/30/2011	12:33 AM	Great	None	6	Very dark skies.  Fox Park, WY.	12.5" f/8 Newtonian	19mm – A small oval void.  19mm – A dark heart shaped void. Very faint stars
B108	7/30/2011	12:35 AM	Great	None	5 or 6	Very dark skies.	12.5" f/8 Newtonian	outline void with bottom of heart to left.
B112	7/30/2011	12:36 AM	Great	None	5 or 6	Fox Park, WY. Very dark skies.	12.5" f/8 Newtonian	19mm – A small, oval void. No stars on void.
B115	7/30/2011	12:38 AM	Great	None	5 or 6	Fox Park, WY. Very dark skies.	12.5" f/8 Newtonian	19mm – A horizontal void bounded by a circle of faint stars.
B118	7/30/2011	12:39 AM	Great	None	4	Fox Park, WY. Very dark skies.	12.5" f/8 Newtonian	19mm – An irregular void with 1 brighter stars and 10-20 very faint stars on void.
B314	7/30/2011	12:42 AM	Great	None	3 or 4	Fox Park, WY. Very dark skies.	12.5" f/8 Newtonian	32mm – A larger void that fills FOV nicely with some stars seen on void.
B100	7/30/2011	12:44 AM	Great	None	4 or 5	Fox Park, WY. Very dark skies.	12.5" f/8 Newtonian	32mm – A larger void that fills FOV nicely. Couple of stars seen on void.
B97	7/30/2011	12:46 AM	Great	None	5	Fox Park, WY. Very dark skies.	12.5" f/8 Newtonian	32mm – A larger void that overwhelms FOV. 5-10 brighter stars on void.
B95	7/30/2011	12:48 AM	Great	None	4 or 5	Fox Park, WY. Very dark skies.	12.5" f/8 Newtonian	32mm – A roughly circular void with few stars on void.

						Fox Park, WY.		32mm – A vertical rectangular shaped void
B162	7/30/2011	12:51 AM	Great	None	4 or 5	Very dark skies.	12.5" f/8 Newtonian	bounded by stars.

## **Observational Statistics:**

Observed 35 of 35 (Required)

35 of 35 (Optional) 70 of 70 Seen

## **Magnifications Used:**

9mm 282x

10mm 254x

15mm 173x

19mm 134x

32mm 80x

55mm 46x

## **Abbreviations:**

AV - Adverted Vision

FOV - Field of View of Eyepiece

DV - Direct Vision