

MALLONEE-COPPINGER OPERATIONS, INC.

DUNLAP #1

OWLL

DIPMETER REPORT

SCHLUMBERGER WELL SURVEYING CORPORATION

HOUSTON, TEXAS

February 2, 1966

PLEASE REPLY TO:
SUITE 1120 WICHITA PLAZA BLDG.
WICHITA, KANSAS 67202

Mallonee-Coppinger Operations, Inc.
1207 Union National Building
Wichita, Kansas

Gentlemen:

This report is intended to summarize our interpretation of the Continuous Dipmeter Survey ran on your Dunlap #1, Seward County, Kansas. Included in this report is the graphic presentation of dip calculations, the tabular presentation of dip calculations and a series of dip frequency polar diagrams the interpretation of which is discussed below.

The entire interval from 5900-TD in this well appears to be a system of sediments filling a large trough. The trend of this trough is NW-SE. The sediments filling this trough were transported from NW to SE. The presence of red patterns to both the NE and SW indicate that this well is on a high on the SW flank of the trough and the center of the trough is to the NE from this well. This trough is evidently very wide as evidenced by your Teagarden #1, Long #1, and Dunlap #1 all having red patterns to both the NE and SW.

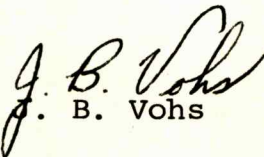
No Chester Sands were present in this well and sand development can be expected back to the NE from this well.

The lime interval 6654-6670 in this well is described by the polar diagram of the interval 6600-6666. This polar diagram indicates a preferred dip direction of nearly due West and a strike of N-S. An offset to the NW or SE should find this lime interval productive but Chester Sand development will not be encountered.

The interpretations of Dipmeter logs and the geological conclusions which are discussed in this report represent our best judgment. Nevertheless, since all interpretations and the conclusions reached are based on inferences from electrical and other measurements, as well as geological data which necessarily includes the consideration of some unproven factors,

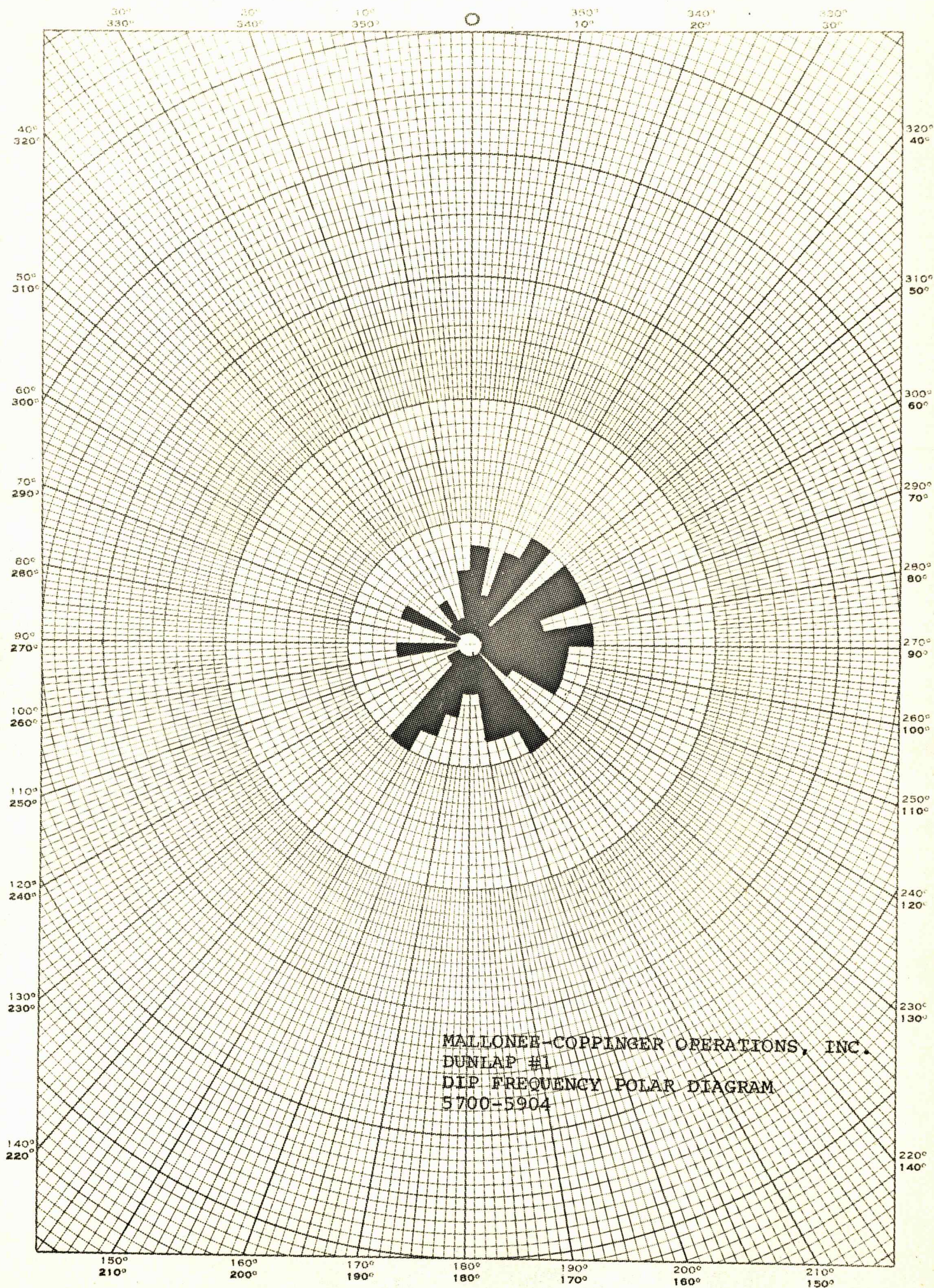
we must advise you that we cannot and do not guarantee their accuracy or correctness and shall not be liable or responsible, except in the case of willful negligence on our part, for any loss, costs, damages or expenses that may be incurred or sustained from such interpretations or the geological conclusions set out in this report.

Thank you for calling Schlumberger on this well. If we can be of further assistance, please feel free to call on us at any time.


J. B. Vohs

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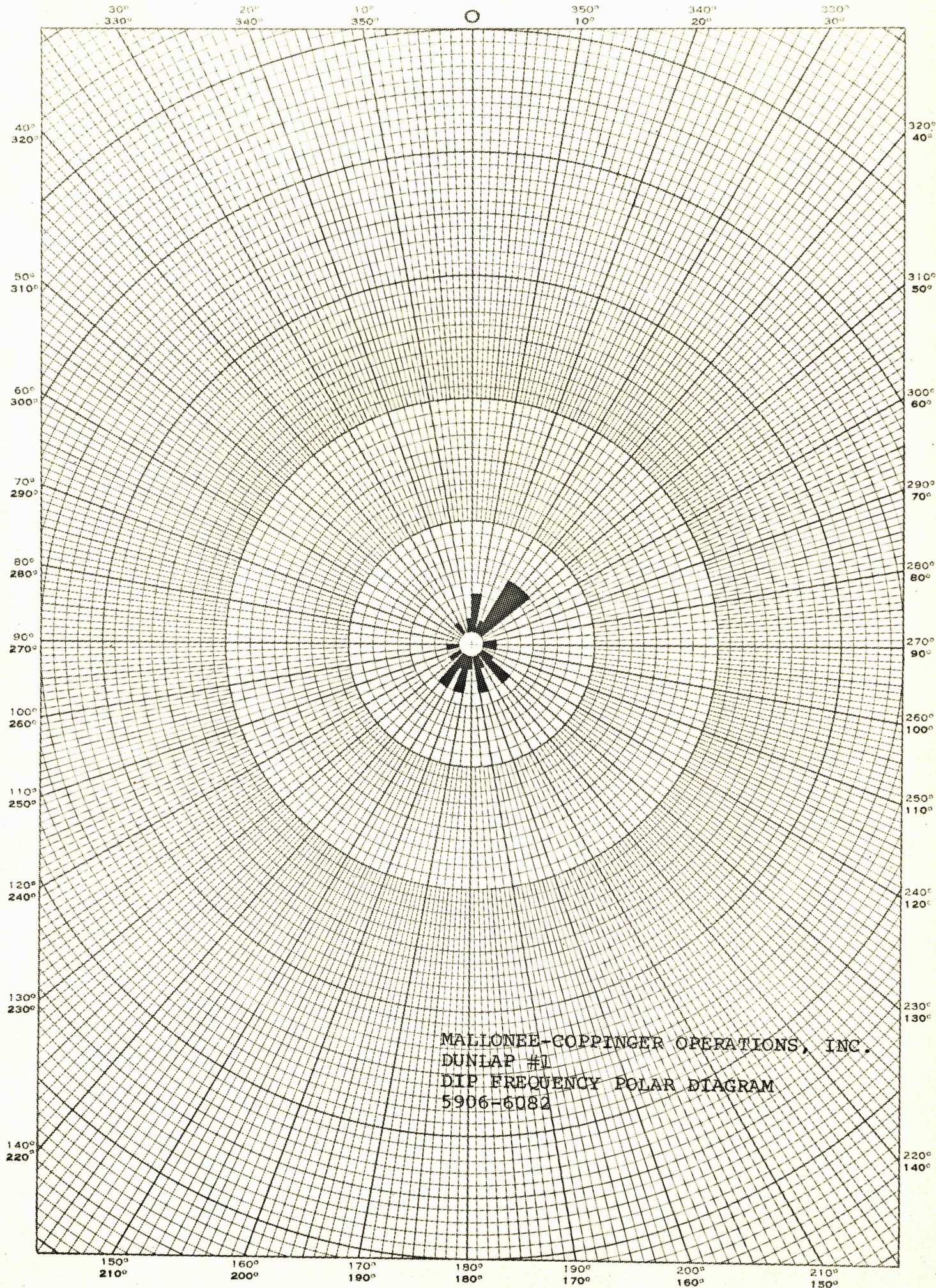
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POLAR CO-ORDINATE



MALLONEE-COPPINGER OPERATIONS, INC.
DUNLAP #1
DIP FREQUENCY POLAR DIAGRAM
5700-5904

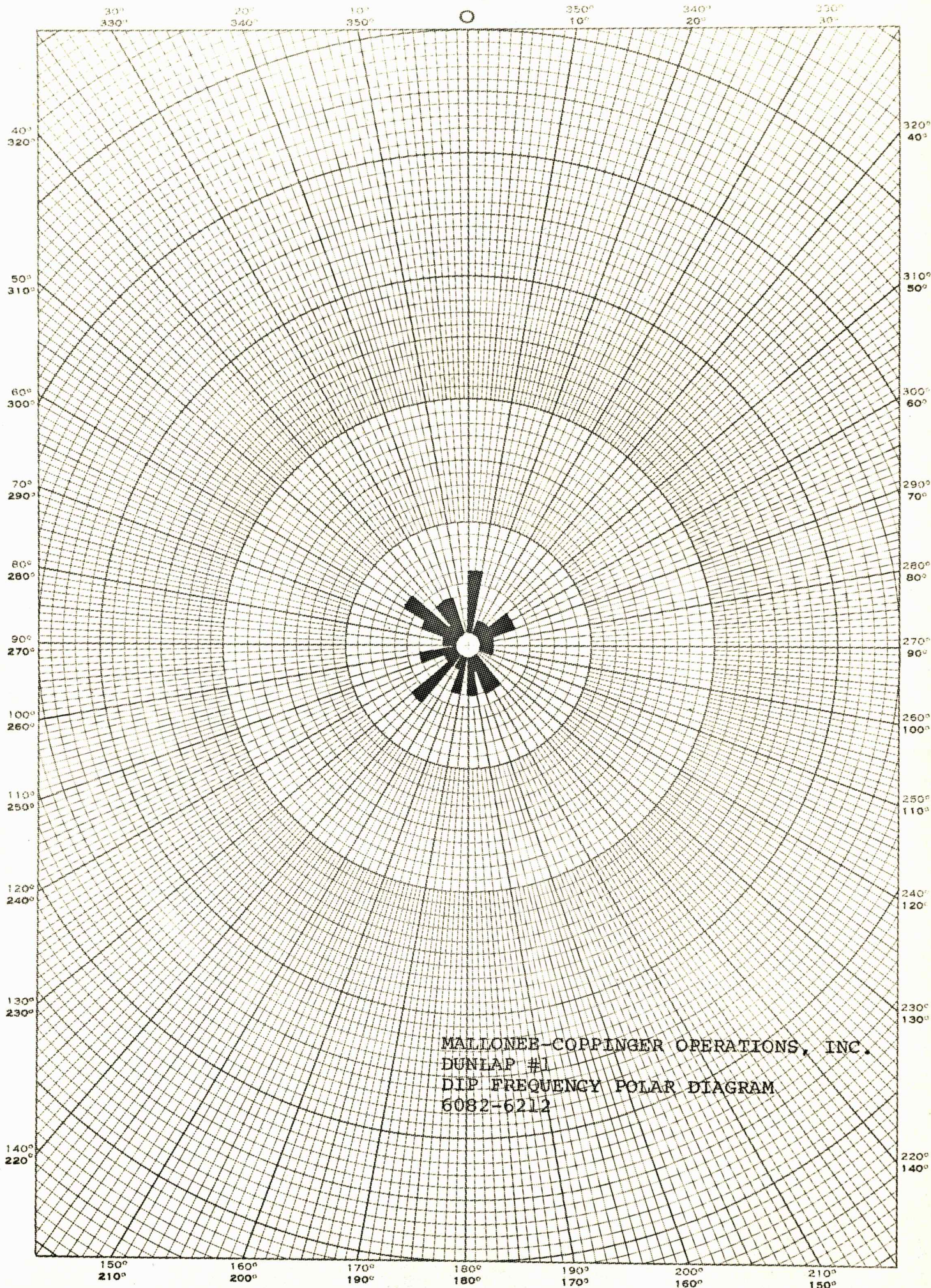
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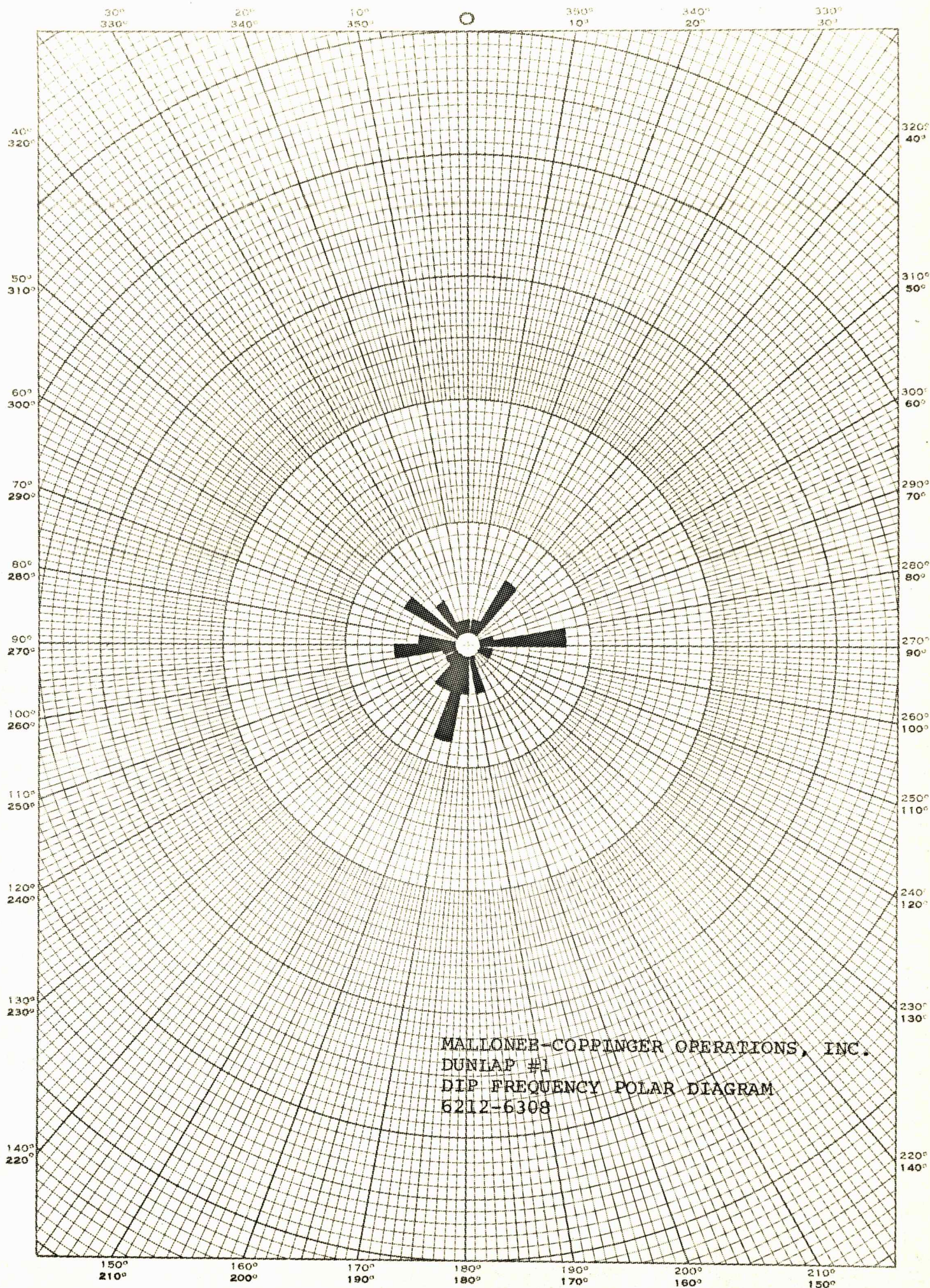
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DIP FREQUENCY POLAR DIAGRAM
6082-6212

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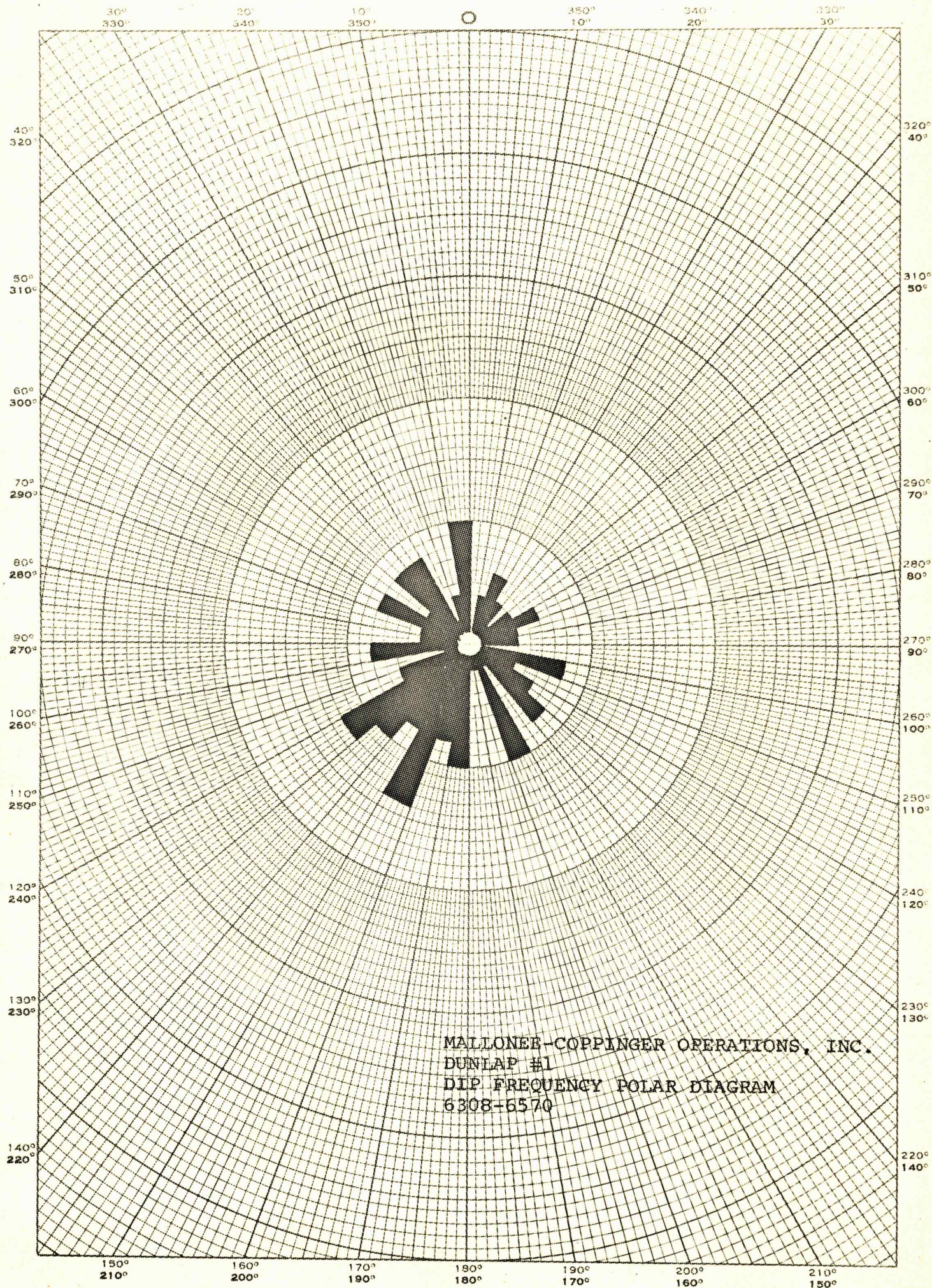
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DUNIAP #1
DIP FREQUENCY POLAR DIAGRAM
62112-6308

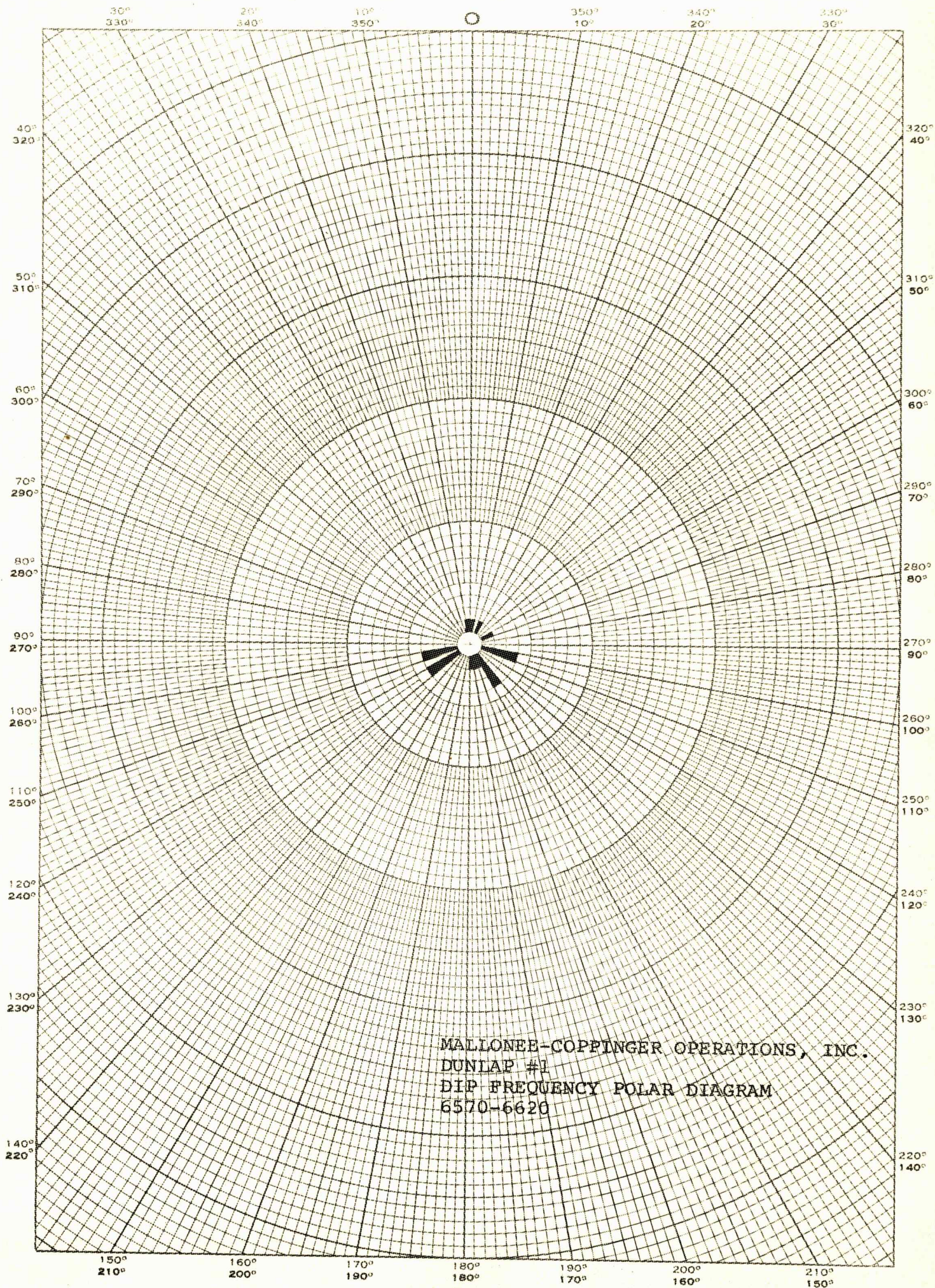
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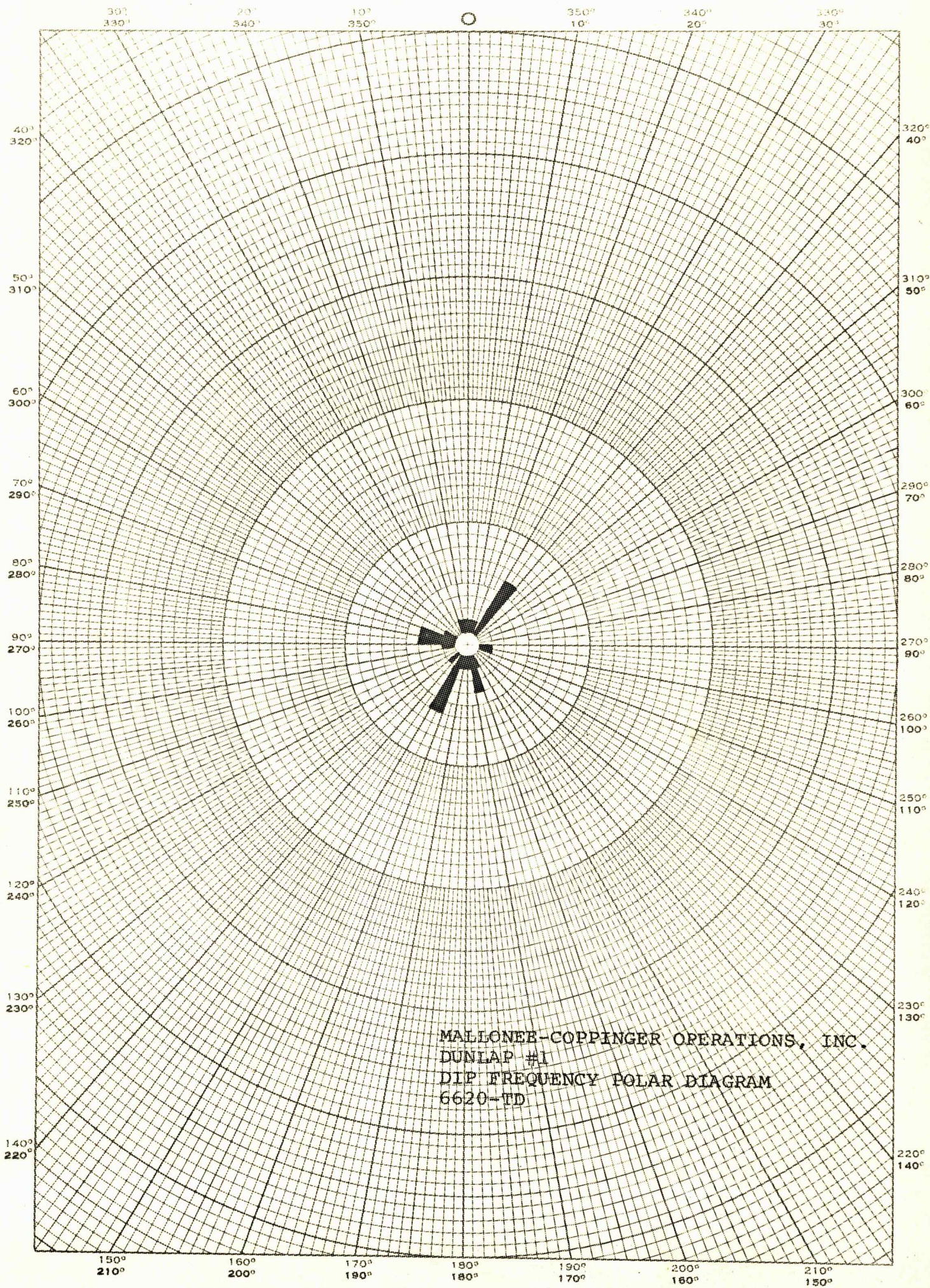
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MADE IN U. S. A.

NO. 340-P DIETZEN GRAPH PAPER
POLAR CO-ORDINATE

MALLONEE-COPPINGER OPERATIONS, INC.
DUNLAP #1
DIP FREQUENCY POLAR DIAGRAM
6600-6666

EUGENE DIETZGEN CO.
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POLAR CO-ORDINATE



MALLONEE-COPPINGER OPERATIONS, INC.
DUNLAP #1
DIP FREQUENCY POLAR DIAGRAM
6620-TD

MALLONEE COPPINGER OPERATIONS, INC.

SCHLUMBERGER WELL SURVEYING CORPORATION
CONTINUOUS DIPMETER CALCULATIONSDUNLAP NO.1
SEC.8, TWP.35S, RGE.34W
SEWARD COUNTY, KANSAS

DEPTH	DIP	AZM	BRG	QUAL	DEV	AZM	BRG	AZI	RBR	DIA
5700	19.7	101	S 79 E	70	2.2	321	N 39 W	152	191	10.6
5702	4.8	145	S 35 E	97	2.1	327	N 33 W	141	175	8.4
5704	8.0	57	N 57 E	98	2.1	323	N 37 W	131	168	8.5
5706	2.8	265	S 85 W	97	1.9	331	N 29 W	127	155	8.4
5708	2.2	297	N 63 W	81	1.8	328	N 32 W	108	140	10.0
5710	.3	65	N 65 E	82	1.9	329	N 31 W	97	128	8.3
5712	4.9	70	N 70 E	72	1.6	335	N 25 W	91	116	10.4
5714	17.0	286	N 74 W	74	1.7	341	N 19 W	84	104	10.5
5716	8.2	28	N 28 E	27	1.6	338	N 22 W	77	99	10.5
5718	1.2	199	S 19 W	84	1.8	332	N 28 W	65	92	9.0
5720	5.8	203	S 23 W	90	1.7	334	N 26 W	56	81	8.6
5722	3.0	313	N 47 W	98	2.0	325	N 35 W	42	77	8.3
5726	21.1	338	N 22 W	55	1.9	330	N 30 W	38	68	10.3
5730	2.2	24	N 24 E	85	1.9	329	N 31 W	15	45	10.1
5732	3.0	152	S 28 E	77	2.0	331	N 29 W	7	36	10.0
5734	6.5	145	S 35 E	97	1.9	324	N 36 W		36	8.2
5736	3.7	1	N 1 E	90	2.1	332	N 28 W		28	9.2
5738	1.4	290	N 70 W	88	2.1	335	N 25 W		25	9.6
5740	2.0	168	S 12 E	87	2.1	335	N 25 W		25	9.1
5742	4.3	153	S 27 E	81	2.2	319	N 41 W	346	27	9.7
5744	4.4	54	N 54 E	67	2.1	338	N 22 W	338		10.2
5746	5.7	34	N 34 E	99	2.2	329	N 31 W	329		8.2
5750	18.0	194	S 14 W	87	1.9	335	N 25 W	322	347	8.7
5752	2.4	64	N 64 E	90	1.7	332	N 28 W	316	344	9.7
5754	1.1	65	N 65 E	92	1.9	336	N 24 W	302	326	9.3
5756	3.7	111	S 69 E	82	2.0	335	N 25 W	294	320	10.1
5758	6.0	90	S 90 E	92	2.0	336	N 24 W	292	316	9.0
5760	16.7	115	S 65 E	56	2.2	336	N 24 W	289	313	10.4
5762	3.6	85	N 85 E	79	2.2	332	N 28 W	278	306	9.7
5764	4.2	214	S 34 W	82	2.2	332	N 28 W	265	294	8.8
5766	2.1	121	S 59 E	98	1.9	334	N 26 W	257	283	8.3
5768	7.0	87	N 87 E	95	1.9	335	N 25 W	253	277	8.9
5770	.8	115	S 65 E	73	2.0	326	N 34 W	250	284	9.1
5772	3.7	105	S 75 E	86	1.8	329	N 31 W	240	272	8.6
774	4.8	85	N 85 E	94	1.8	326	N 34 W	227	261	8.2
5780	4.2	96	S 84 E	75	1.7	325	N 35 W	199	235	9.3
5782	4.6	114	S 66 E	95	1.8	324	N 36 W	189	225	8.5
5784	2.5	211	S 31 W	76	1.7	317	N 43 W	176	220	8.9
5786	8.7	324	N 36 W	49	1.8	319	N 41 W	167	209	9.9
5788	2.3	5	N 5 E	84	1.8	320	N 40 W	162	202	9.3
5790	9.7	166	S 14 E	77	1.9	330	N 30 W		30	8.8
5792	5.3	147	S 33 E	89	1.9	323	N 37 W	349	26	8.3
5794	5.6	55	N 55 E	90	1.9	323	N 37 W	346	23	9.0

5796	1.7	210	S	30	W	85	1.9	325	N	35	W	346	21	9.8
5798	1.4	30	N	30	E	84	1.7	325	N	35	W	345	20	9.5
5800	4.6	210	S	30	W	51	2.0	337	N	23	W	337		10.5
5802	4.6	72	N	72	E	56	1.9	339	N	21	W	330	351	10.5
5804	2.1	209	S	29	W	73	2.0	338	N	22	W	323	345	9.8
5806	10.4	143	S	37	E	75	2.1	333	N	27	W	316	343	9.4
5808	9.0	200	S	20	W	28	1.9	342	N	18	W	311	329	10.6
5810	3.2	68	N	68	E	78	2.0	337	N	23	W	303	326	8.6
5812	6.7	358	N	2	W	87	2.0	332	N	28	W	294	322	8.3
5814	8.8	74	N	74	E	89	2.0	335	N	25	W	291	316	8.5
5816	2.1	104	S	76	E	68	2.0	340	N	20	W	291	310	9.6
5818	2.5	153	S	27	E	97	1.9	327	N	33	W	277	310	8.5
5820	7.8	142	S	38	E	92	1.6	329	N	31	W	265	296	8.6
5822	8.9	186	S	6	W	83	1.9	326	N	34	W	256	290	8.5
5824	5.6	168	S	12	E	97	2.0	325	N	35	W	246	280	8.4
5826	2.9	266	S	86	W	55	2.0	322	N	38	W	235	272	8.3
5828	27.6	176	S	4	E	79	2.1	330	N	30	W	225	254	8.2
5830	10.0	32	N	32	E	93	2.1	329	N	31	W	215	246	8.2
5832	2.8	49	N	49	E	102	1.9	328	N	32	W	205	236	8.2
5834	3.5	184	S	4	W	84	1.7	329	N	31	W	196	226	9.0
5836	4.9	82	N	82	E	90	1.6	327	N	33	W	187	220	8.5
5838	5.6	359	N	1	W	68	1.5	322	N	38	W	177	214	9.0
5840	3.3	38	N	38	E	98	1.5	323	N	37	W	166	202	8.2
5842	1.8	341	N	19	W	97	1.4	324	N	36	W	154	190	8.7
5844	.7	52	N	52	E	72	1.5	321	N	39	W	145	184	10.0
5846	.8	360	N		W	94	1.6	326	N	34	W	138	172	8.4
5848	1.3	5	N	5	E	96	1.5	327	N	33	W	130	163	8.5
5850	1.8	78	N	78	E	87	1.6	326	N	34	W	126	160	9.3
5852	16.2	3	N	3	E	73	1.5	334	N	26	W	113	139	9.7
5854	5.4	269	S	89	W	75	1.6	334	N	26	W	102	128	10.3
5856	2.4	235	S	55	W	93	1.6	338	N	22	W	92	114	8.3
5858	3.2	328	N	32	W	86	1.5	342	N	18	W	83	101	8.4
5860	1.5	218	S	38	W	97	1.6	339	N	21	W	76	97	8.3
5864	.9	294	N	66	W	95	1.6	339	N	21	W	62	83	8.6
5866	1.0	10	N	10	E	99	1.5	341	N	19	W	56	75	8.3
5868	2.6	215	S	35	W	97	1.6	340	N	20	W	50	69	8.3
5870	1.6	53	N	53	E	72	1.6	340	N	20	W	43	63	8.2
5872	5.0	25	N	25	E	89	1.6	341	N	19	W	37	56	8.2
5874	2.2	62	N	62	E	98	1.6	340	N	20	W	30	50	8.2
5876	3.3	168	S	12	E	91	1.6	341	N	19	W	24	43	8.2
5878	5.5	23	N	23	E	80	1.6	343	N	17	W	16	33	8.2
5880	2.6	37	N	37	E	80	1.7	344	N	16	W	11	27	8.2
5882	.5	13	N	13	E	70	1.8	335	N	25	W		25	8.2
5884	6.9	93	S	87	E	94	1.8	326	N	34	W	346	20	8.2
5886	20.8	351	N	9	W	71	1.8	338	N	22	W	338		8.2
5888	29.7	156	S	24	E	26	1.8	337	N	23	W	330	353	8.2
5890	16.3	82	N	82	E	22	1.7	338	N	22	W	321	343	8.2
5892	2.8	84	N	84	E	98	1.7	338	N	22	W	313	335	8.1
5894	7.2	172	S	8	E	74	1.7	341	N	19	W	303	322	8.2
5896	4.4	222	S	42	W	91	1.9	341	N	19	W	294	313	8.1
5900	13.1	90	N	90	E	69	1.8	337	N	23	W	267	291	8.2
5902	11.7	105	S	75	E	86	1.7	332	N	28	W	259	287	8.4
5904	2.5	127	S	53	E	77	1.7	327	N	33	W	247	280	8.4
5906	3.9	37	N	37	E	97	1.6	334	N	26	W	240	266	8.9
5908	5.8	28	N	28	E	90	1.5	333	N	27	W	230	257	8.2
5910	25.3	358	N	2	W	86	1.4	325	N	35	W	216	251	8.1
5912	18.2	36	N	36	E	74	1.4	338	N	22	W	203	224	8.2

5914	7.3	47	N	47	E	90	1.3	329	N	31	W	190	221	8.9
5916	18.2	2	N	2	E	51	1.5	329	N	31	W	183	214	10.3
5918	26.6	261	S	61	W	8	1.5	326	N	34	W	171	204	10.0
5926	1.7	211	S	31	W	45	1.5	329	N	31	W	123	154	11.1
5928	.8	162	S	18	E	81	1.4	346	N	14	W	103	117	11.2
5934	12.0	48	N	48	E	34	1.6	337	N	23	W	96	119	11.3
5936	19.4	181	S	1	W	30	1.3	349	N	11	W	94	104	11.0
5938	15.5	132	S	48	E	68	1.3	347	N	13	W	90	103	10.1
5940	1.9	326	N	34	W	46	1.3	345	N	15	W	100	114	10.9
5944	24.4	197	S	17	W	33	1.6	347	N	13	W	99	113	12.6
5946	12.0	6	N	6	E	51	1.5	347	N	13	W	97	110	11.7
5948	5.5	218	S	38	W	31	1.4	345	N	15	W	97	112	12.6
5952	10.5	135	S	45	E	14	1.7	335	N	25	W	92	117	13.3
5956	4.9	99	S	81	E	35	1.6	343	N	17	W	87	104	13.6
5960	22.0	166	S	14	E	33	1.9	333	N	27	W	77	104	13.9
5962	21.9	192	S	12	W	30	1.8	333	N	27	W	76	102	13.9
5966	2.1	32	N	32	E	30	1.7	333	N	27	W	69	96	14.5
5968	11.6	50	N	50	E	22	1.8	344	N	16	W	62	78	14.7
5972	6.3	80	N	80	E	30	1.9	338	N	22	W	69	91	14.2
5976	13.3	201	S	21	W	36	1.8	335	N	25	W	70	94	14.1
5978	2.1	232	S	52	W	16	1.9	335	N	25	W	68	93	14.2
5980	14.6	128	S	52	E	30	1.9	335	N	25	W	66	92	14.1
5982	18.9	151	S	29	E	8	2.0	334	N	26	W	68	94	14.1
5984	5.8	175	S	5	E	48	1.9	332	N	28	W	74	102	13.5
5986	13.0	39	N	39	E	26	1.8	332	N	28	W	76	104	13.4
5992	15.1	360	N		W	23	1.8	334	N	26	W	76	102	13.9
5996	12.6	209	S	29	W	39	1.8	324	N	36	W	75	111	13.0
5998	10.0	292	N	68	W	27	1.8	323	N	37	W	76	114	13.2
6008	7.9	43	N	43	E	58	1.8	337	N	23	W	85	108	12.7
6010	10.6	158	S	22	E	17	1.5	336	N	24	W	100	123	12.7
6020	6.7	192	S	12	W	5	1.7	339	N	21	W	98	119	11.4
6032	2.0	274	N	86	W	10	1.7	340	N	20	W	88	108	12.7
6048	14.5	146	S	34	E	37	1.7	357	N	3	W	98	101	12.5
6062	5.0	323	N	37	W	43	1.3	348	N	12	W	113	125	11.5
6066	6.4	261	S	81	W	40	1.1	354	N	6	W	128	134	13.7
6068	14.7	308	N	52	W	19	1.1	4	N	4	E	135	131	11.7
6070	8.7	152	S	28	E	18	1.5	344	N	16	W	128	144	11.8
6072	12.8	231	S	51	W	-24	1.4	352	N	8	W	112	120	11.3
6082	2.8	229	S	49	W	-4	1.2	352	N	8	W	92	100	9.9
6084	20.9	249	S	69	W	59	1.1	354	N	6	W	115	121	10.0
6088	3.4	227	S	47	W	97	1.2	347	N	13	W	114	127	8.4
6090	17.4	4	N	4	E	51	1.0	359	N	1	W	96	97	9.7
6092	6.9	224	S	44	W	3	1.3	349	N	11	W	96	107	11.0
6100	14.0	61	N	61	E	20	1.2	357	N	3	W	89	92	11.1
6102	3.0	27	N	27	E	27	1.2	3	N	3	E	86	84	10.2
6108	17.2	97	S	83	E	-2	1.3	352	N	8	W	80	87	11.5
6112	18.8	8	N	8	E	33	1.4	356	N	4	W	69	73	11.8
6118	19.3	162	S	18	E	-	1.3	347	N	13	W	62	75	11.6
6120	9.7	53	N	53	E	30	1.3	356	N	4	W	56	60	11.6
6124	14.4	82	N	82	E	44	1.4	345	N	15	W	59	74	11.8
6126	15.3	191	S	11	W	22	1.4	350	N	10	W	60	70	12.2
6130	9.9	253	S	73	W	21	1.3	345	N	15	W	55	70	11.7
6142	6.6	173	S	7	E	-1	1.2	8	N	8	E	81	73	11.5
6146	13.8	295	N	65	W	12	1.2	4	N	4	E	83	79	11.7
6148	20.3	22	N	22	E	3	1.2	349	N	11	W	86	97	11.4
6160	13.0	76	N	76	E	24	1.1	11	N	11	E	84	73	11.5
6164	9.4	52	N	52	E	42	1.1	7	N	7	E	88	81	11.6

6168	12.2	325	N	35	W	22	1.1	16	N	16	E	89	73	11.2
6172	2.4	309	N	51	W	50	1.1	8	N	8	E	85	77	10.8
6186	16.2	338	N	22	W	35	1.4	328	N	32	W	28	60	10.9
6188	10.3	333	N	27	W	23	1.5	328	N	32	W	27	58	11.1
6192	16.8	109	S	71	E	42	.9	332	N	28	W		26	11.3
6196	12.6	306	N	54	W	36	.7	351	N	9	W	351		11.0
6198	8.3	289	N	71	W	27	1.1	356	N	4	W	346	351	11.1
6200	13.9	310	N	50	W	-17	1.1	359	N	1	W	341	342	10.5
6206	9.8	147	S	33	E	43	1.3	7	N	7	E	328	320	10.7
6210	4.2	67	N	67	E	11	1.2	1	N	1	E	329	328	10.7
6212	29.4	254	S	74	W	-2	1.2	6	N	6	E	333	326	10.9
6216	1.9	36	N	36	E	15	1.3	356	N	4	W	325	329	10.4
6220	3.4	266	S	86	W	87	1.3	349	N	11	W	318	330	9.2
6222	3.2	251	S	71	W	99	1.6	3	N	3	E	313	309	8.4
6224	11.0	333	N	27	W	52	1.5	359	N	1	W	311	312	10.1
6226	9.8	265	S	85	W	98	1.5	3	N	3	E	307	304	8.2
6228	59.8	193	S	13	W	44	1.3	5	N	5	E	307	302	8.1
6230	2.2	271	N	89	W	69	1.2	7	N	7	E	305	298	8.2
6232	7.7	81	N	81	E	90	1.2	17	N	17	E	298	281	8.4
6234	24.6	216	S	36	W	97	1.2	16	N	16	E	298	282	8.2
6236	16.3	73	N	73	E	27	1.3	13	N	13	E	294	281	9.2
6238	19.3	104	S	76	E	23	1.2	13	N	13	E	296	283	8.9
6240	4.9	167	S	13	E	81	1.1	8	N	8	E	291	282	9.1
6242	6.3	185	S	5	W	46	1.2	352	N	8	W	269	277	10.4
6246	3.9	111	S	69	E	94	1.2	15	N	15	E	255	240	8.9
6248	5.6	36	N	36	E	96	1.2	20	N	20	E	255	235	8.2
6250	14.2	167	S	13	E	64	1.2	14	N	14	E	249	235	8.2
6252	5.5	302	N	58	W	66	1.0	10	N	10	E	245	235	8.2
6254	12.9	208	S	28	W	91	1.0	7	N	7	E	240	233	8.1
6256	4.1	185	S	5	W	41	.9	1	N	1	E	228	228	8.1
6258	3.7	206	S	26	W	78	.9	5	N	5	E	220	215	8.1
6260	5.9	193	S	13	W	81	.9	1	N	1	E	207	206	8.1
6262	1.0	279	N	81	W	86	.9	3	N	3	E	197	194	8.1
6264	3.9	220	S	40	W	91	.9	2	N	2	E	192	190	8.2
6266	7.9	192	S	12	W	78	.9	7	N	7	E	190	183	8.1
6270	6.2	260	S	80	W	99	1.0	9	N	9	E	180	171	8.2
6272	5.6	325	N	35	W	76	.9	15	N	15	E	178	163	8.2
6274	21.2	198	S	18	W	60	.8	20	N	20	E	170	150	8.1
6276	10.9	322	N	38	W	89	.8	27	N	27	E	158	131	8.2
6278	1.0	210	S	30	W	88	.7	14	N	14	E	142	126	8.6
6282	6.8	345	N	15	W	81	.6	3	N	3	E	129	126	8.2
6284	2.6	238	S	58	W	71	.6	12	N	12	E	141	128	8.2
6286	8.3	300	N	60	W	80	.6	22	N	22	E	130	108	8.3
6288	7.1	17	N	17	E	42	.7	26	N	26	E	122	96	8.3
6290	4.5	84	N	84	E	84	.8	28	N	28	E	113	85	8.4
6296	19.4	30	N	30	E	83	1.0	33	N	33	E	80	47	8.9
6298	2.6	352	N	8	W	22	1.0	44	N	44	E	76	32	9.6
6302	3.0	89	N	89	E	102	1.0	32	N	32	E	66	34	8.2
6304	6.3	35	N	35	E	94	1.1	25	N	25	E	56	31	8.2
6306	13.8	86	N	86	E	55	1.0	19	N	19	E	46	28	8.1
6308	9.6	303	N	57	W	65	1.2	17	N	17	E	37	20	8.0
6310	6.9	155	S	25	E	90	1.1	29	N	29	E	29		8.0
6312	13.2	233	S	53	W	75	1.1	32	N	32	E	18	345	8.0
6314	27.4	142	S	38	E	49	1.1	31	N	31	E	7	336	8.1
6316	4.3	265	S	85	W	96	1.2	24	N	24	E		336	8.2
6318	8.5	219	S	39	W	71	1.1	23	N	23	E		337	8.2
6320	3.7	105	S	75	E	98	1.2	20	N	20	E	355	335	8.2

6324	9.6	130	S	50	E	79	1.1	17	N	17	E	344	327	8.2
6326	3.8	157	S	23	E	88	1.2	25	N	25	E	336	311	8.2
6328	2.7	65	N	65	E	95	1.2	20	N	20	E	328	307	8.7
6330	5.9	209	S	29	W	98	1.2	17	N	17	E	319	302	8.8
6332	4.4	181	S	1	W	95	1.3	17	N	17	E	312	295	8.2
6334	8.8	236	S	56	W	79	1.1	21	N	21	E	312	291	8.8
6336	3.7	228	S	48	W	84	1.1	18	N	18	E	311	293	8.6
6338	4.6	295	N	65	W	96	1.2	15	N	15	E	303	288	8.3
6340	19.3	60	N	60	E	82	1.2	13	N	13	E	294	281	8.2
6342	7.3	48	N	48	E	36	1.1	10	N	10	E	288	279	10.4
6344	6.1	248	S	68	W	31	1.1	5	N	5	F	285	279	11.4
6346	10.3	115	S	65	E	8	1.2	8	N	8	E	277	269	12.0
6348	3.4	102	S	78	E	96	1.1	11	N	11	E	261	250	9.9
6350	2.8	180	S		E	57	1.0	3	N	3	E	247	244	8.6
6356	12.8	359	N	1	W	73	1.0	16	N	16	E	235	219	8.4
6358	3.9	155	S	25	E	80	.9	12	N	12	E	224	212	8.7
6360	6.3	12	N	12	E	67	.9	20	N	20	E	214	195	8.2
6362	8.4	281	N	79	W	81	.9	22	N	22	E	208	186	8.2
6364	2.4	130	S	50	E	92	.9	16	N	16	F	200	184	8.3
6366	8.8	204	S	24	W	64	.8	5	N	5	F	190	185	8.6
6368	9.5	166	S	14	E	34	.8	10	N	10	E	177	166	8.2
6370	14.1	315	N	45	W	90	.8	18	N	18	E	163	145	8.4
6372	3.8	320	N	40	W	79	.9	13	N	13	F	152	138	8.2
6374	5.4	270	S	90	W	92	1.0	19	N	19	E	140	121	8.3
6376	1.9	311	N	49	W	93	1.0	25	N	25	F	131	105	8.4
6378	.7	34	N	34	E	96	.8	26	N	26	E	117	92	8.2
6382	5.5	332	N	28	W	42	.5	36	N	36	E	93	57	8.1
6384	4.4	267	S	87	W	9	.8	40	N	40	E	84	44	8.1
6386	10.2	288	N	72	W	79	.9	36	N	36	E	74	38	8.1
6388	7.0	308	N	52	W	77	.9	29	N	29	E	63	34	8.2
6390	5.0	221	S	41	W	60	.9	29	N	29	E	57	28	8.5
6392	9.2	113	S	67	E	64	1.0	50	N	50	E	50		8.2
6394	5.6	21	N	21	E	77	1.0	40	N	40	E	40		8.2
6396	6.3	52	N	52	E	48	1.1	30	N	30	E	30		8.5
6398	14.8	353	N	7	W	38	1.1	35	N	35	F	20	345	8.7
6400	4.6	58	N	58	E	40	1.1	32	N	32	E	10	338	8.6
6402	14.0	359	N	1	W	58	1.1	34	N	34	E		326	8.5
6404	3.9	63	N	63	E	67	1.1	30	N	30	E	349	320	8.3
6406	2.3	277	N	83	W	95	1.2	28	N	28	E	338	311	8.2
6408	4.0	353	N	7	W	54	1.2	29	N	29	F	329	299	8.3
6410	6.7	214	S	34	W	62	1.2	29	N	29	E	322	293	8.7
6412	9.2	234	S	54	W	89	1.2	30	N	30	E	312	282	8.5
6414	9.9	204	S	24	W	82	1.2	25	N	25	E	303	279	8.3
6416	10.2	207	S	27	W	70	1.2	18	N	18	F	295	277	8.2
6418	13.3	153	S	27	E	80	1.3	18	N	18	F	285	267	8.2
6420	2.9	298	N	62	W	90	1.3	13	N	13	E	273	260	8.3
6422	9.1	248	S	68	W	88	1.2	23	N	23	F	265	242	8.5
6424	10.8	325	N	35	W	36	1.1	19	N	19	E	255	236	8.5
6426	3.3	26	N	26	E	23	1.0	24	N	24	E	244	220	8.5
6428	.9	184	S	4	W	72	.9	34	N	34	E	236	203	8.7
6430	1.9	76	N	76	E	28	.7	28	N	28	E	228	201	9.3
6434	15.2	131	S	49	E	44	.8	15	N	15	E	213	197	9.7
6436	12.7	82	N	82	E	30	.8	22	N	22	E	206	184	9.7
6438	18.1	62	N	62	E	45	.8	23	N	23	E	201	178	9.4
6442	18.3	150	S	30	E	50	.8	35	N	35	E	191	156	9.5
6452	15.5	310	N	50	W	62	.9	47	N	47	E	171	124	9.2
6454	2.4	264	S	84	W	90	1.0	48	N	48	F	172	124	9.7

6460	6.2	253	S	73	W	64	.9	54	N	54	E	151	97	8.0
6462	2.9	291	N	69	W	69	.9	51	N	51	E	140	89	8.1
6464	1.3	349	N	11	W	89	.9	49	N	49	E	127	78	8.1
6468	4.8	225	S	45	W	76	1.0	47	N	47	E	98	51	8.3
6470	4.1	18	N	18	E	82	1.1	44	N	44	E	88	45	8.3
6472	6.0	220	S	40	W	84	1.1	43	N	43	E	75	33	8.3
6474	5.9	297	N	63	W	89	1.3	39	N	39	E	63	24	8.2
6476	4.0	210	S	30	W	75	1.3	50	N	50	E	50		8.3
6478	2.2	195	S	15	W	92	1.3	46	N	46	E	37	351	8.2
6480	2.1	200	S	20	W	87	1.3	48	N	48	E	28	340	8.2
6482	2.5	219	S	39	W	43	1.4	46	N	46	E	16	330	8.2
6484	2.7	198	S	18	W	73	1.4	41	N	41	E		319	8.2
6486	.8	123	S	57	E	60	1.3	43	N	43	E	350	307	8.2
6488	.8	227	S	47	W	93	1.5	45	N	45	E	339	295	8.2
6490	.6	191	S	11	W	59	1.4	37	N	37	E	329	291	8.2
6492	4.0	74	N	74	E	28	1.4	37	N	37	E	317	280	8.2
6498	10.1	228	S	48	W	72	1.2	30	N	30	E	282	251	8.2
6500	12.0	187	S	7	W	-8	1.3	28	N	28	E	271	243	8.2
6502	1.7	30	N	30	E	91	1.2	29	N	29	E	261	232	8.2
6504	.7	240	S	60	W	82	1.3	28	N	28	E	249	221	8.2
6506	7.8	341	N	19	W	93	1.2	25	N	25	E	235	210	8.2
6508	1.0	318	N	42	W	80	1.1	29	N	29	E	221	192	8.2
6510	12.2	106	S	74	E	66	1.1	27	N	27	E	200	182	8.2
6512	5.5	24	N	24	E	49	1.0	32	N	32	E	193	161	8.1
6514	.8	177	S	3	E	85	.9	35	N	35	E	177	142	8.2
6516	1.3	327	N	33	W	90	.9	42	N	42	E	165	123	8.2
6518	1.4	105	S	75	E	96	.9	43	N	43	E	152	109	8.2
6520	3.9	207	S	27	W	92	1.0	41	N	41	E	138	97	8.3
6522	30.2	236	S	56	W	28	.9	53	N	53	E	127	73	8.2
6524	4.0	359	N	1	W	82	.9	57	N	57	E	111	55	8.2
6526	7.0	320	N	40	W	83	1.0	55	N	55	E	101	46	9.1
6528	5.7	120	S	60	E	37	1.0	59	N	59	E	98	39	9.9
6542	12.5	139	S	41	E	26	1.3	46	N	46	E		314	12.0
6548	18.7	248	S	68	W	78	1.2	28	N	28	E		332	10.2
6550	8.1	239	S	59	W	84	1.3	35	N	35	E	349	315	8.2
6552	21.6	183	S	3	W	17	1.3	32	N	32	E	342	310	8.2
6554	5.5	127	S	53	E	59	1.2	35	N	35	E	334	299	8.1
6562	5.8	203	S	23	W	77	1.1	30	N	30	E	302	272	8.3
6564	12.2	84	N	84	E	57	1.1	32	N	32	E	290	258	8.2
6566	14.2	268	S	88	W	66	1.1	26	N	26	E	277	251	8.1
6570	3.1	305	N	55	W	88	1.1	29	N	29	E	252	222	8.1
6572	25.0	356	N	4	W	36	1.1	38	N	38	E	240	203	8.3
6576	6.6	240	S	60	W	71	.9	37	N	37	E	212	175	8.2
6578	2.5	179	S	1	E	81	.8	50	N	50	E	197	147	8.2
6580	7.8	6	N	6	E	70	.8	51	N	51	E	180	129	8.1
6586	7.5	105	S	75	E	87	.8	59	N	59	E	138	78	8.1
6588	3.5	145	S	25	E	79	.8	62	N	62	E	124	61	8.1
6590	7.6	107	S	73	E	90	.8	61	N	61	E	111	49	8.1
6594	4.9	141	S	39	E	84	.9	52	N	52	E	82	29	8.1
6596	5.1	158	S	22	E	86	.9	46	N	46	E	69	23	8.1
6600	4.4	255	S	75	W	68	1.0	45	N	45	E	45		8.1
6602	7.0	235	S	55	W	55	1.1	47	N	47	E	36	348	8.1
6604	6.1	166	S	14	E	75	1.2	50	N	50	E	23	333	8.1
6606	22.7	22	N	22	E	81	1.2	46	N	46	E	11	325	8.1
6610	24.1	64	N	64	E	27	1.3	40	N	40	E	343	303	8.1
6620	10.3	252	S	72	W	25	1.0	30	N	30	E	280	250	8.1
6622	10.3	354	N	6	W	34	.9	34	N	34	E	266	232	8.1

6624	2.0	157	S	23	E	48	.8	29	N	29	E	254	224	8.1
6626	16.5	11	N	11	E	67	.7	32	N	32	E	241	208	8.1
6630	8.2	181	S	1	W	75	.6	32	N	32	E	211	179	8.1
6632	19.8	202	S	22	W	61	.7	31	N	31	E	199	167	8.1
6634	16.0	276	N	84	W	33	.6	34	N	34	E	187	153	8.1
6636	18.4	287	N	73	W	-7	.7	37	N	37	E	176	139	8.0
6638	21.5	295	N	65	W	32	.6	49	N	49	E	159	110	8.1
6644	20.2	267	S	87	W	69	.8	57	N	57	E	120	63	8.1
6650	26.1	196	S	16	W	31	1.0	56	N	56	E	73	17	8.0
6654	2.2	105	S	75	E	72	1.1	63	N	63	E	48	346	8.0
6658	10.1	348	N	12	W	69	1.2	62	N	62	E	27	326	7.9
6660	18.8	92	S	88	E	12	1.3	62	N	62	E	14	312	8.0
6664	5.9	283	N	77	W	77	1.4	45	N	45	E	349	305	8.0
6666	6.1	34	N	34	E	15	1.4	46	N	46	E	347	302	7.8
6672	13.1	209	S	29	W	62	1.5	40	N	40	E	327	287	7.7
6674	23.9	206	S	26	W	16	1.4	40	N	40	E	329	288	7.7
6678	16.8	164	S	16	E	82	1.4	43	N	43	E	320	278	7.9
6680	4.0	164	S	16	E	95	1.3	44	N	44	E	311	267	8.1
6682	9.4	3	N	3	E	50	1.2	37	N	37	E	297	260	8.1
6684	23.1	227	S	47	W	49	1.0	32	N	32	E	283	250	8.1
6686	12.9	272	N	88	W	36	.9	33	N	33	E	269	237	8.1
6688	18.7	31	N	31	E	15	.9	20	N	20	E	253	232	8.0
6690	5.8	174	S	6	E	34	.8	17	N	17	E	238	221	8.2
6696	13.5	33	N	33	E	4	.8	53	N	53	E	195	142	8.0