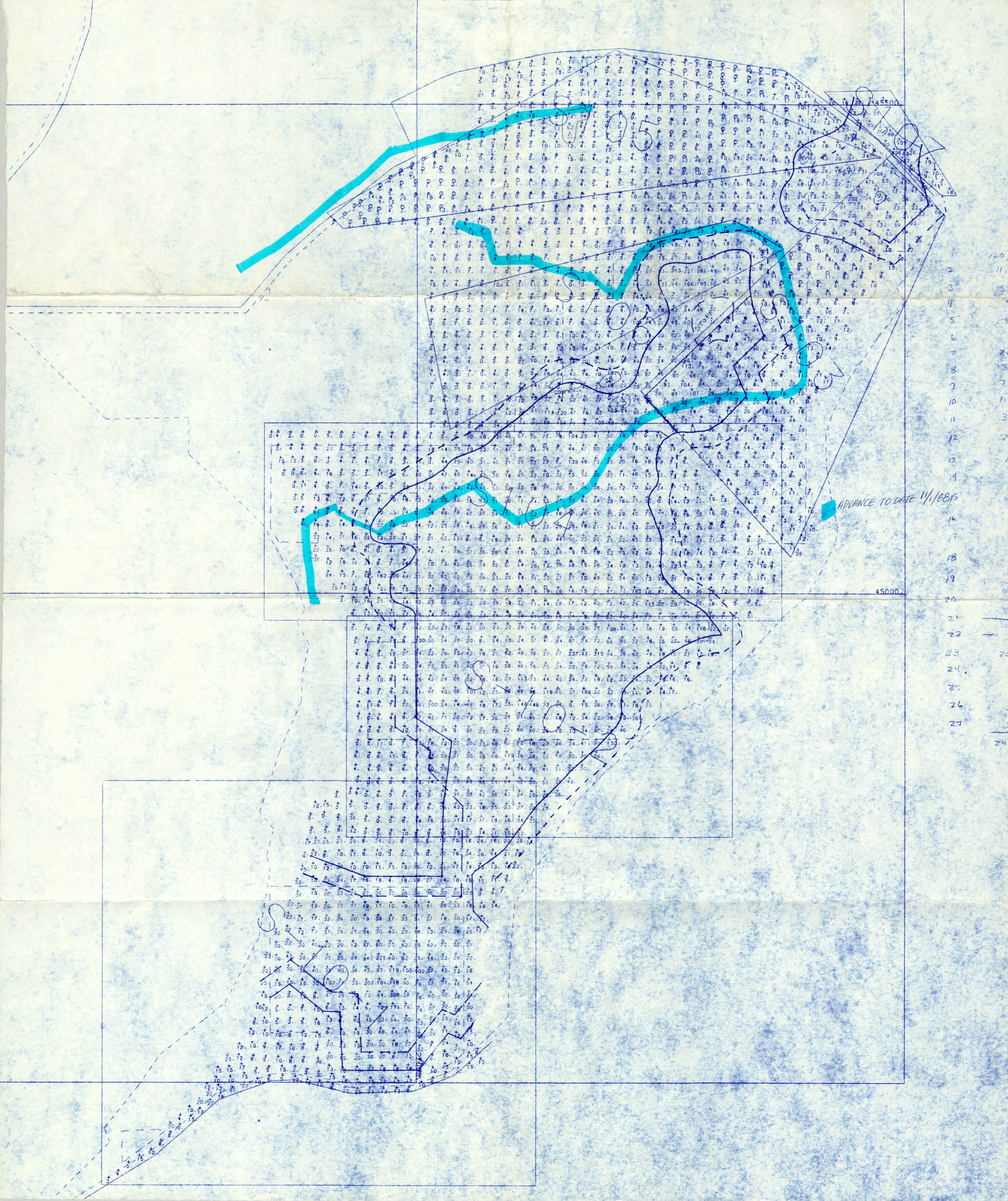
ADVANCE TO DATE 11/1/88
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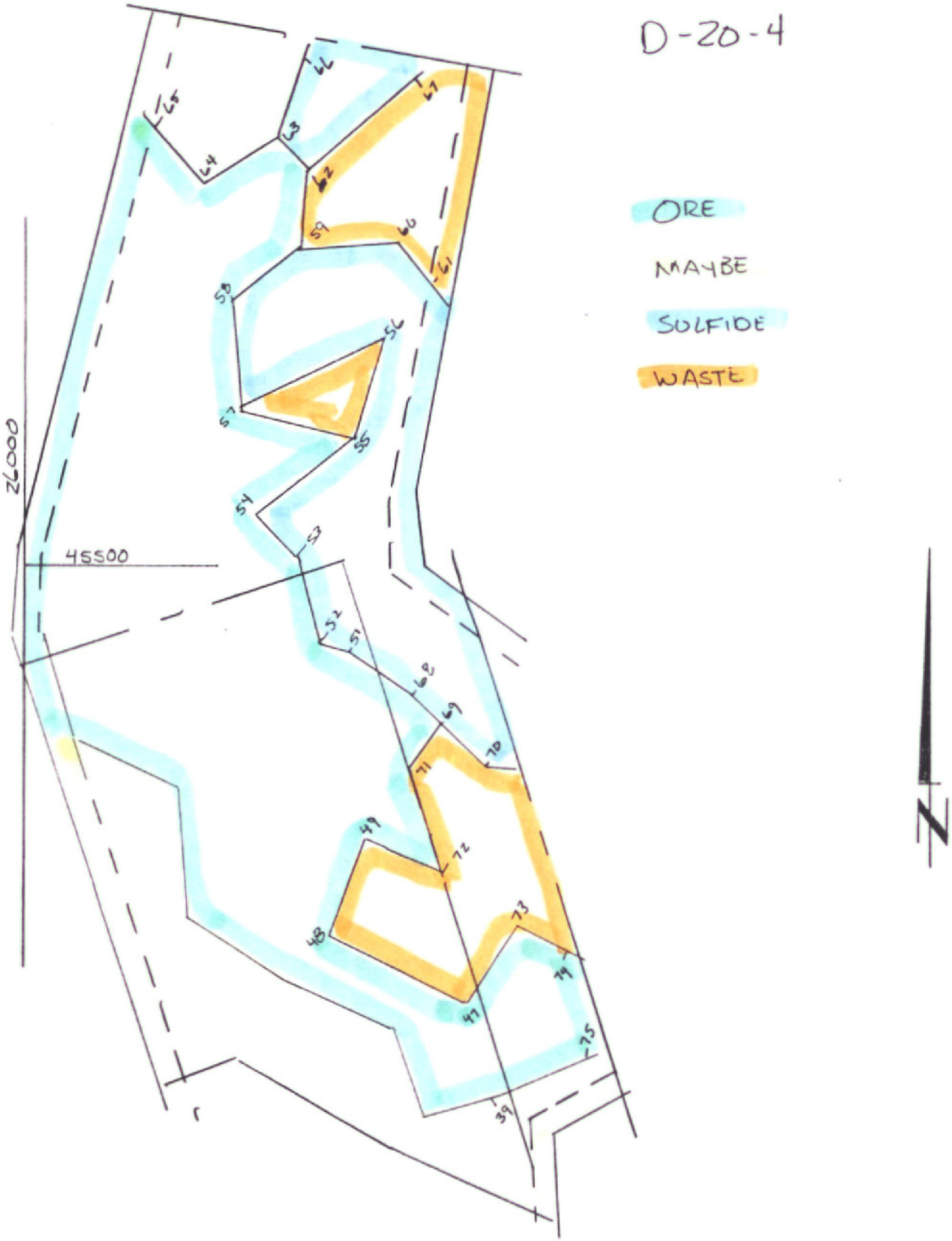
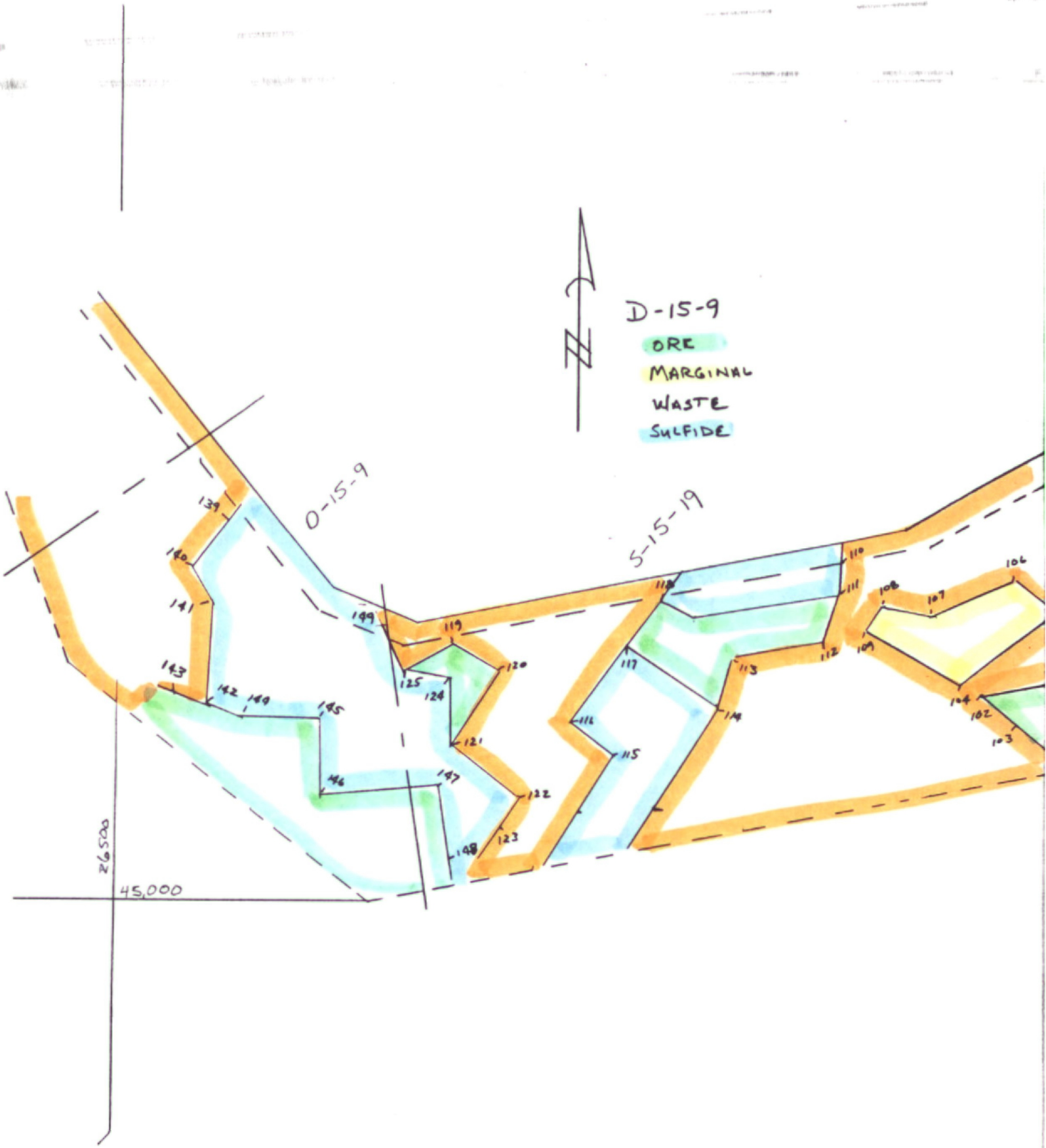
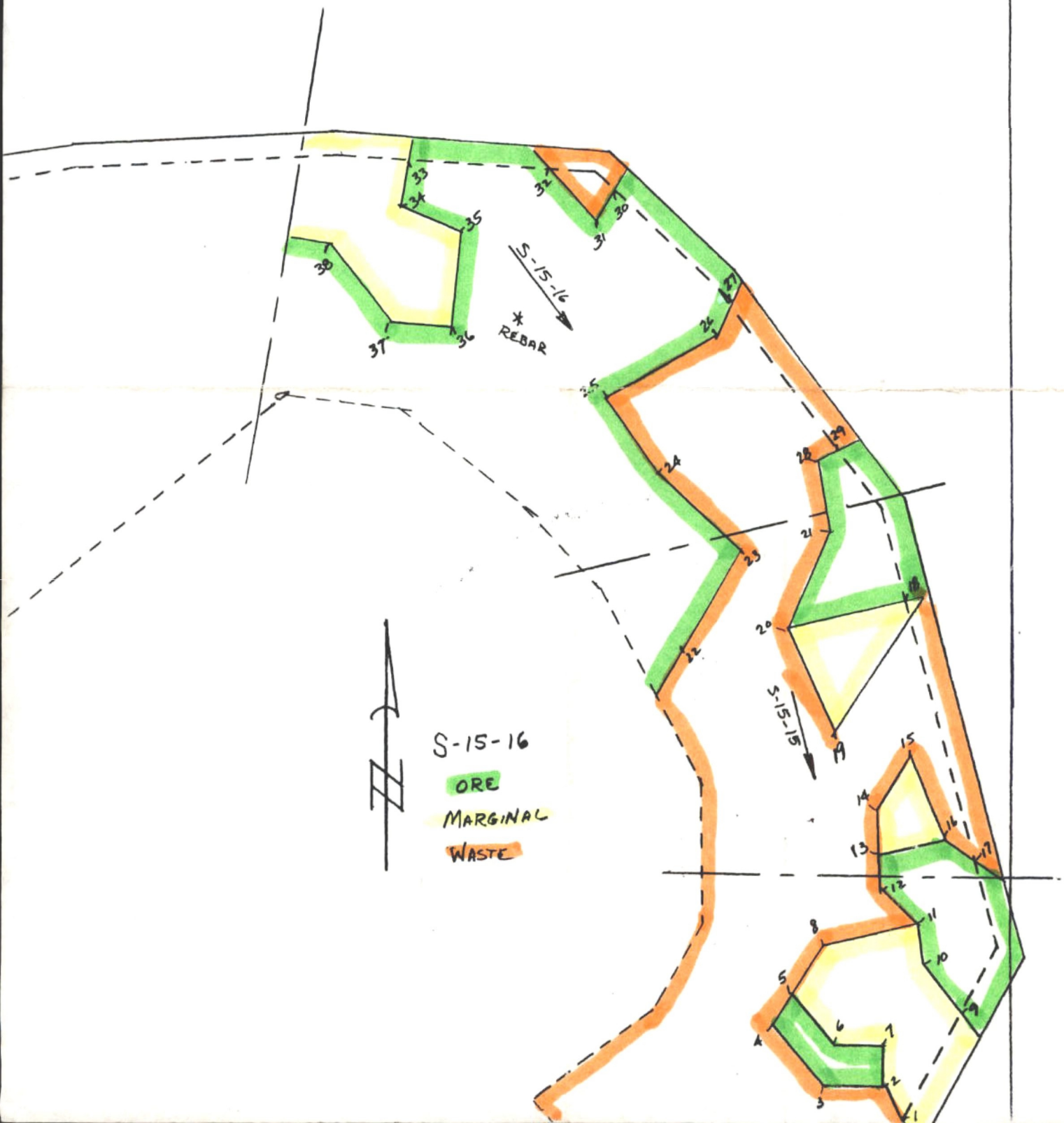
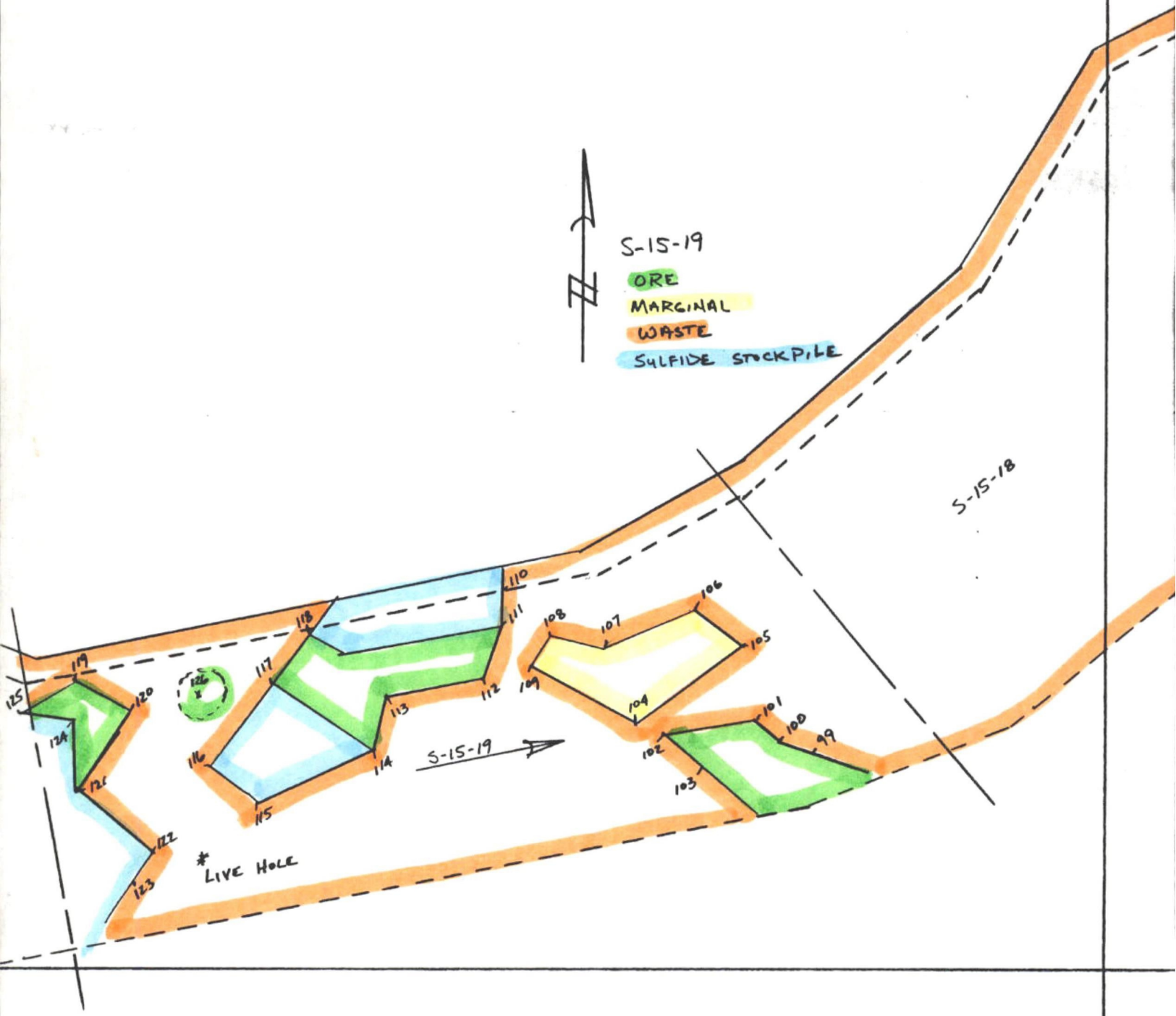
STOPED

D-20-4




D-15-9
ORE
MARGINAL
WASTE
SULFIDE
0-15-9
5-15-19
26,500
45,000


S-15-16
ORE
MARGINAL
WASTE
S-15-16
S-15-15
REBAR
A


S-15-19
ORE
MARGINAL
WASTE
SULFIDE STOCKPILE
S-15-18
S-15-19
* LIVE HOLE
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100
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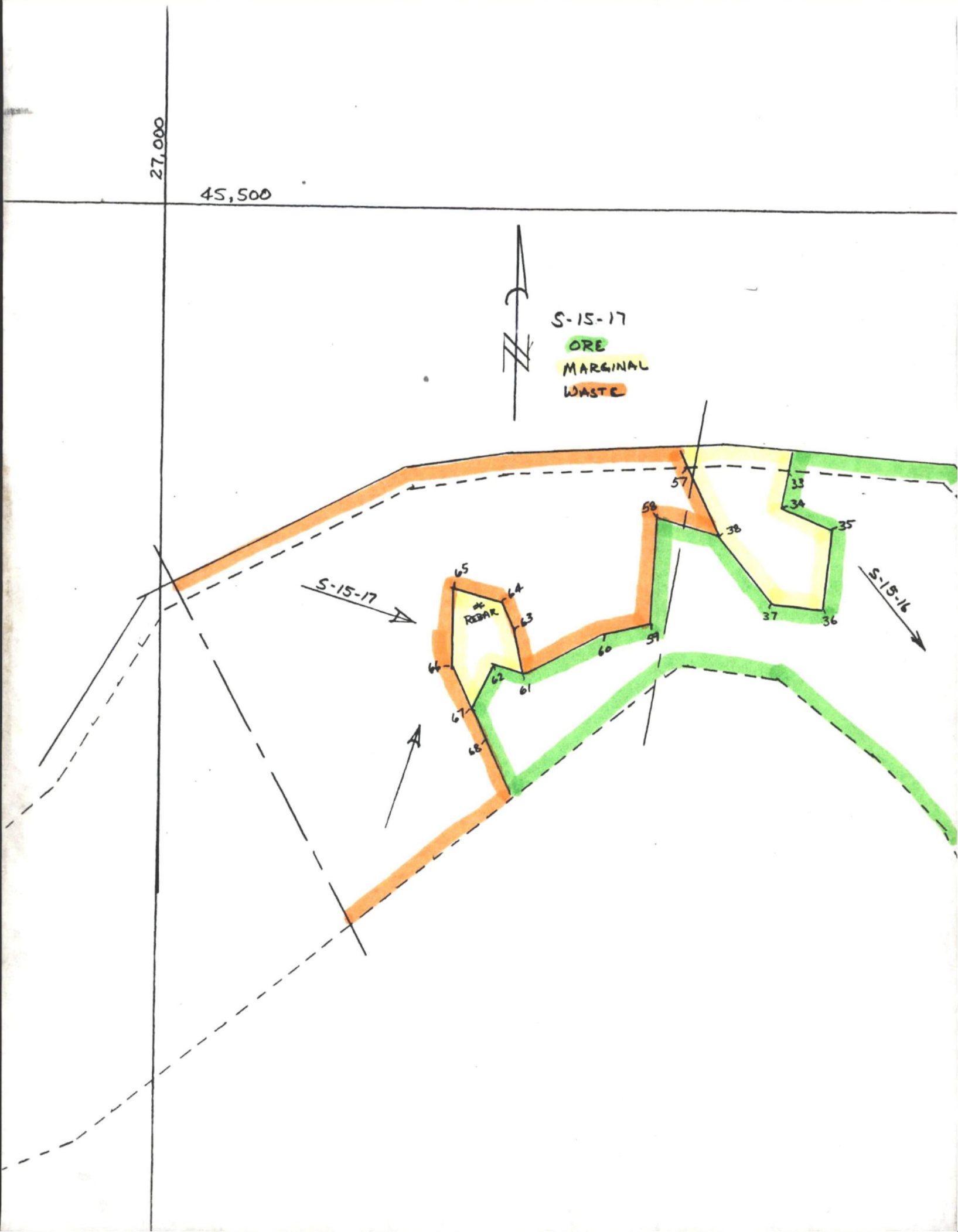
27,000
45,500
S-15-17
ORE
MARGINAL
WASTE
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#4 REBAR
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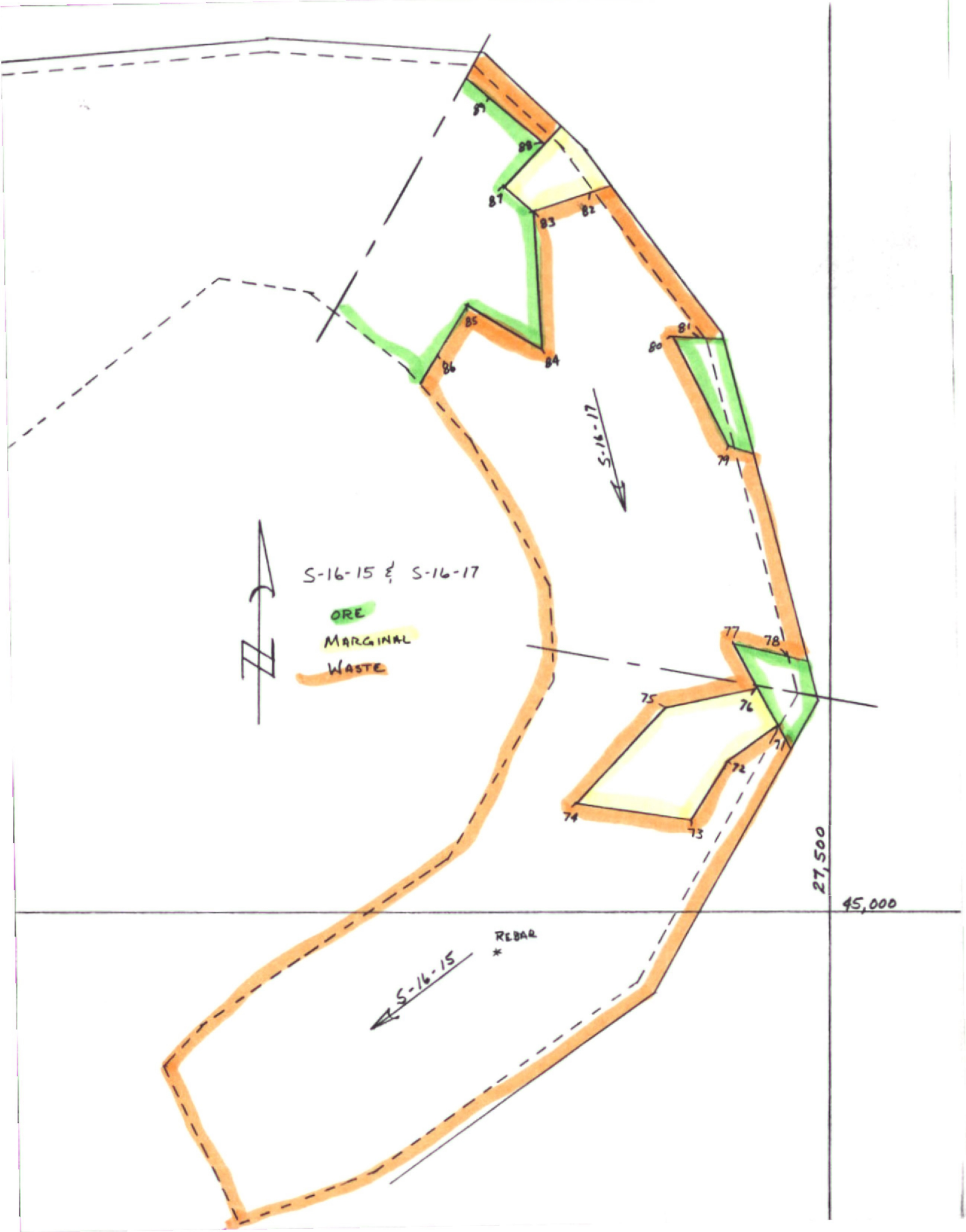
S-16-15 & S-16-17
ORE
MARGINAL
WASTE
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S-16-17
S-16-15
REBAR
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45,000
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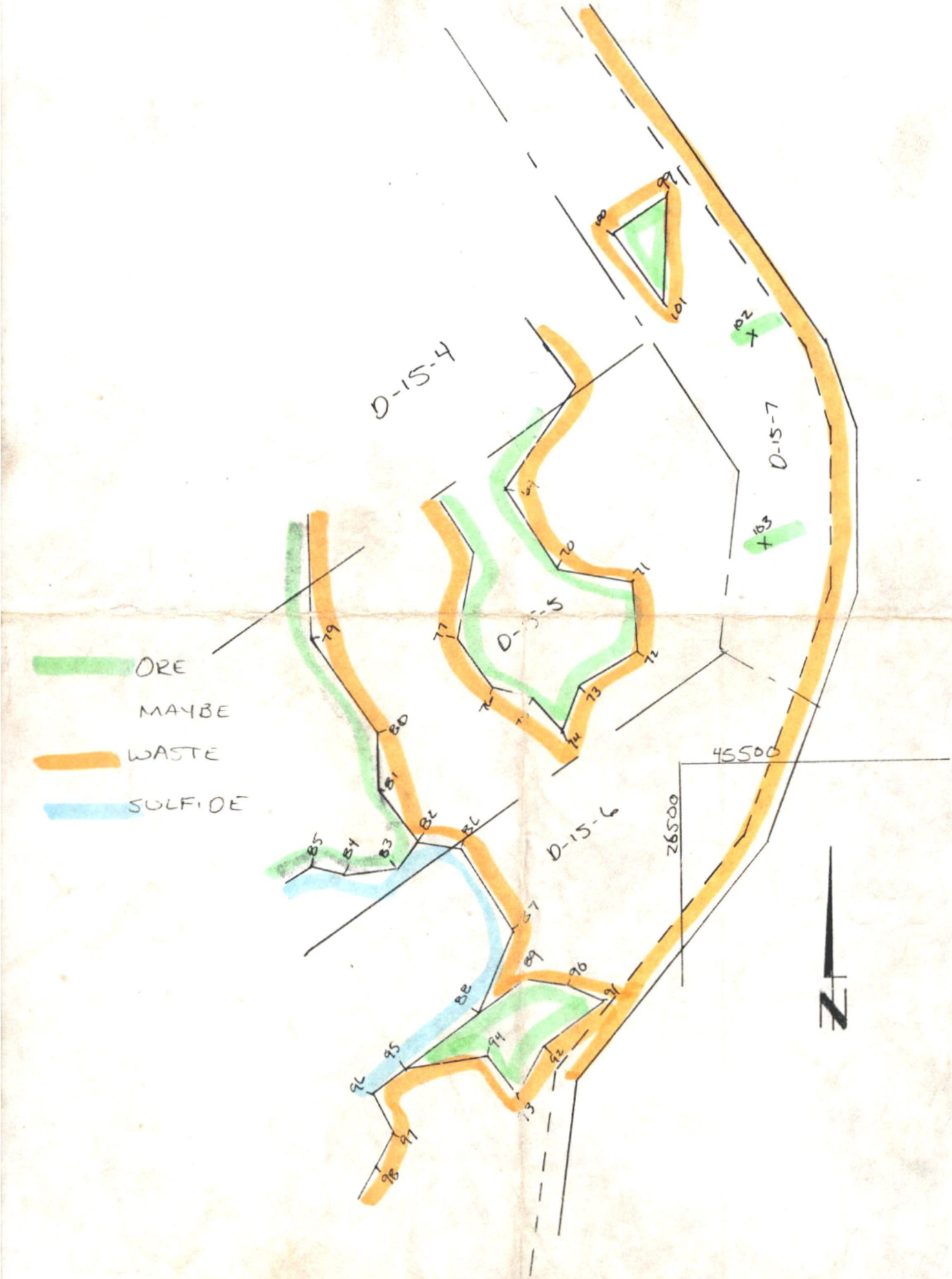
ORE
MAYBE
WASTE
SULFIDE
D-15-4
D-15-5
D-15-6
D-15-7
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26500
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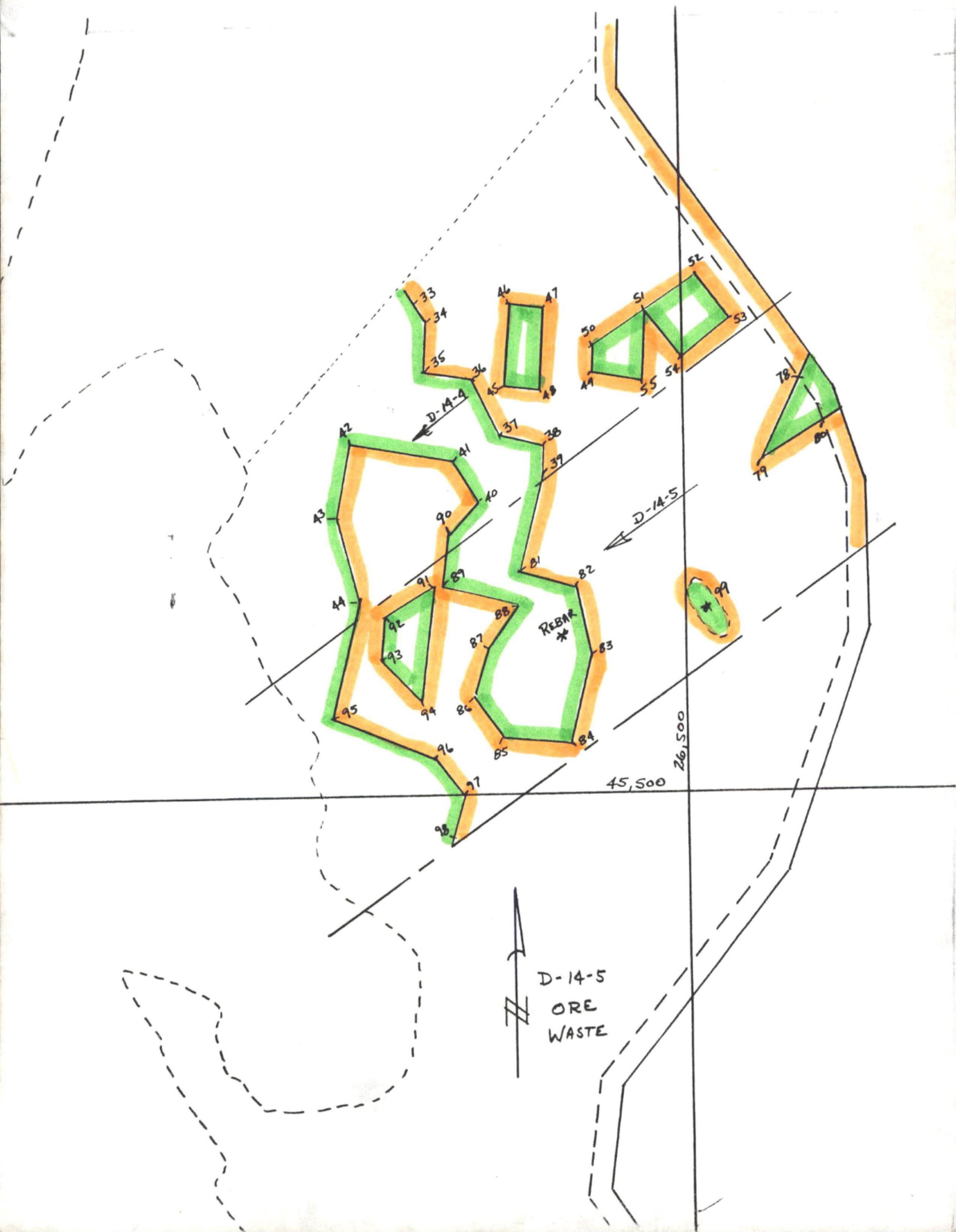
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D-14-4
D-14-5
REBAR
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D-14-5
ORE
WASTE

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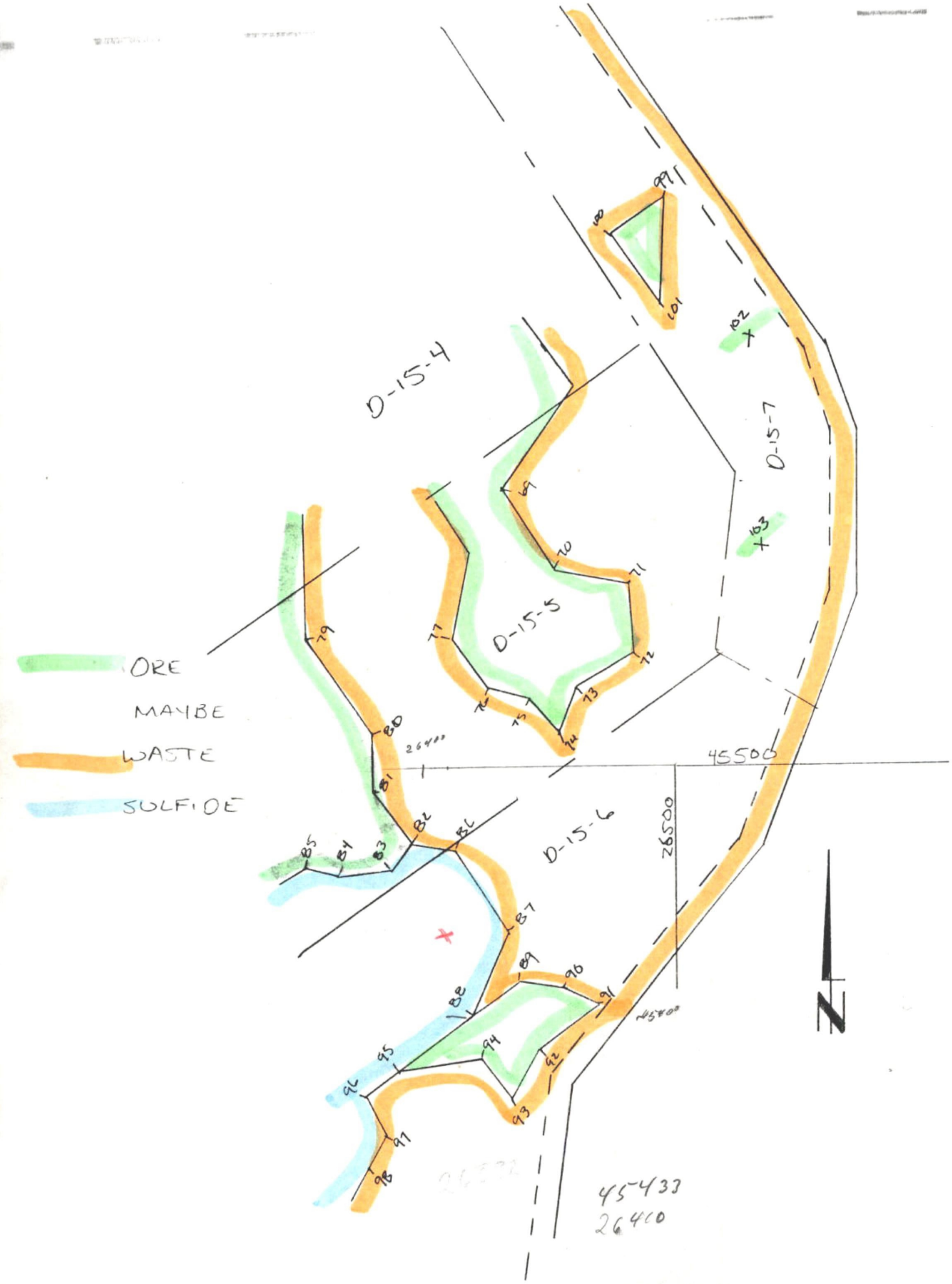
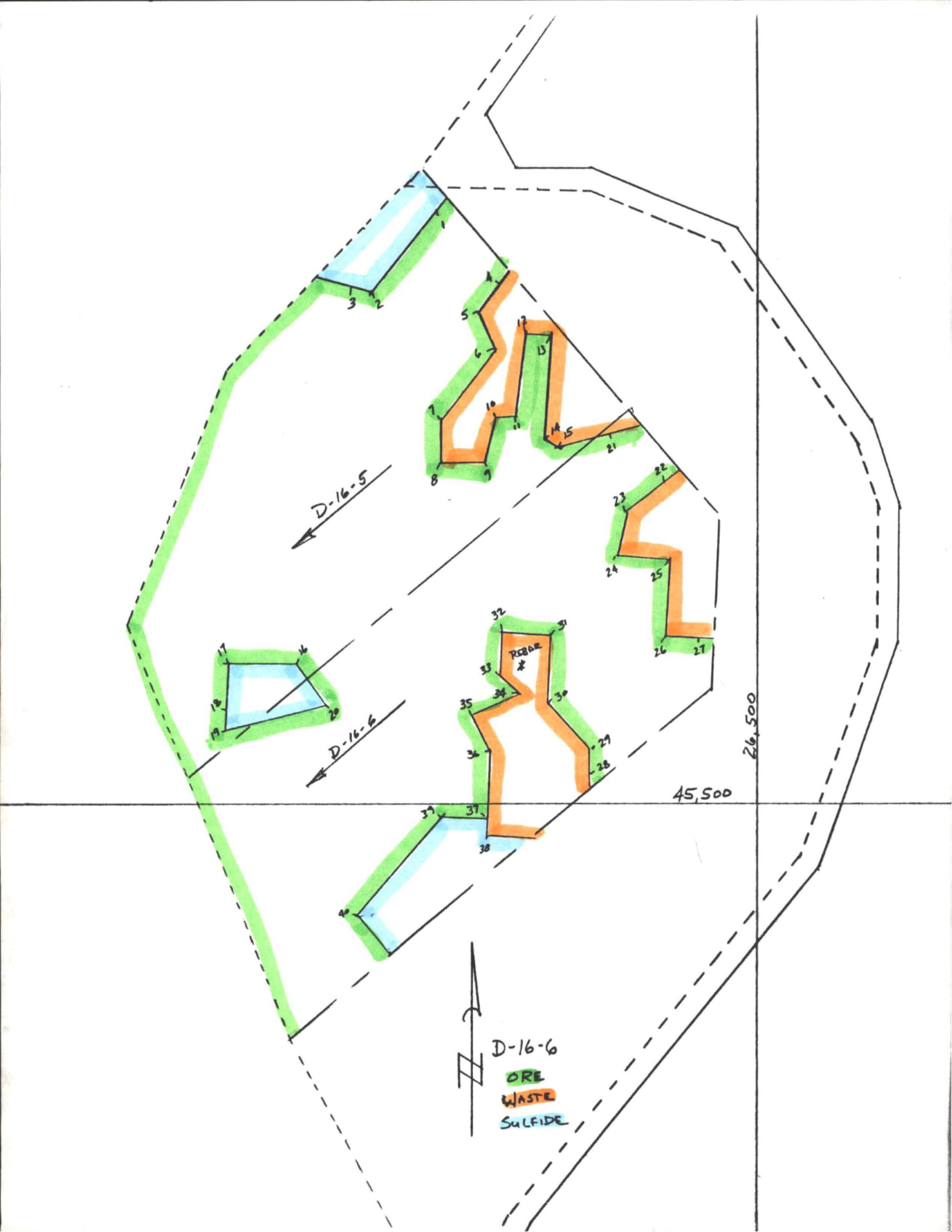
REBAR
N
ORE =
WASTE =
SULFIDE =
45,500
26,500

ORE POO

for BLAST PATTERN

D-15-S


ORE
MAYBE
WASTE
SULFIDE
D-15-4
D-15-5
D-15-6
D-15-7
45500
26500
26400
45400
45-433
26400
N


D-16-5
D-16-6
REBAR
45,500
26,500
D-16-6
ORE
WASTE
SULFIDE

D-15-16
D-15-8
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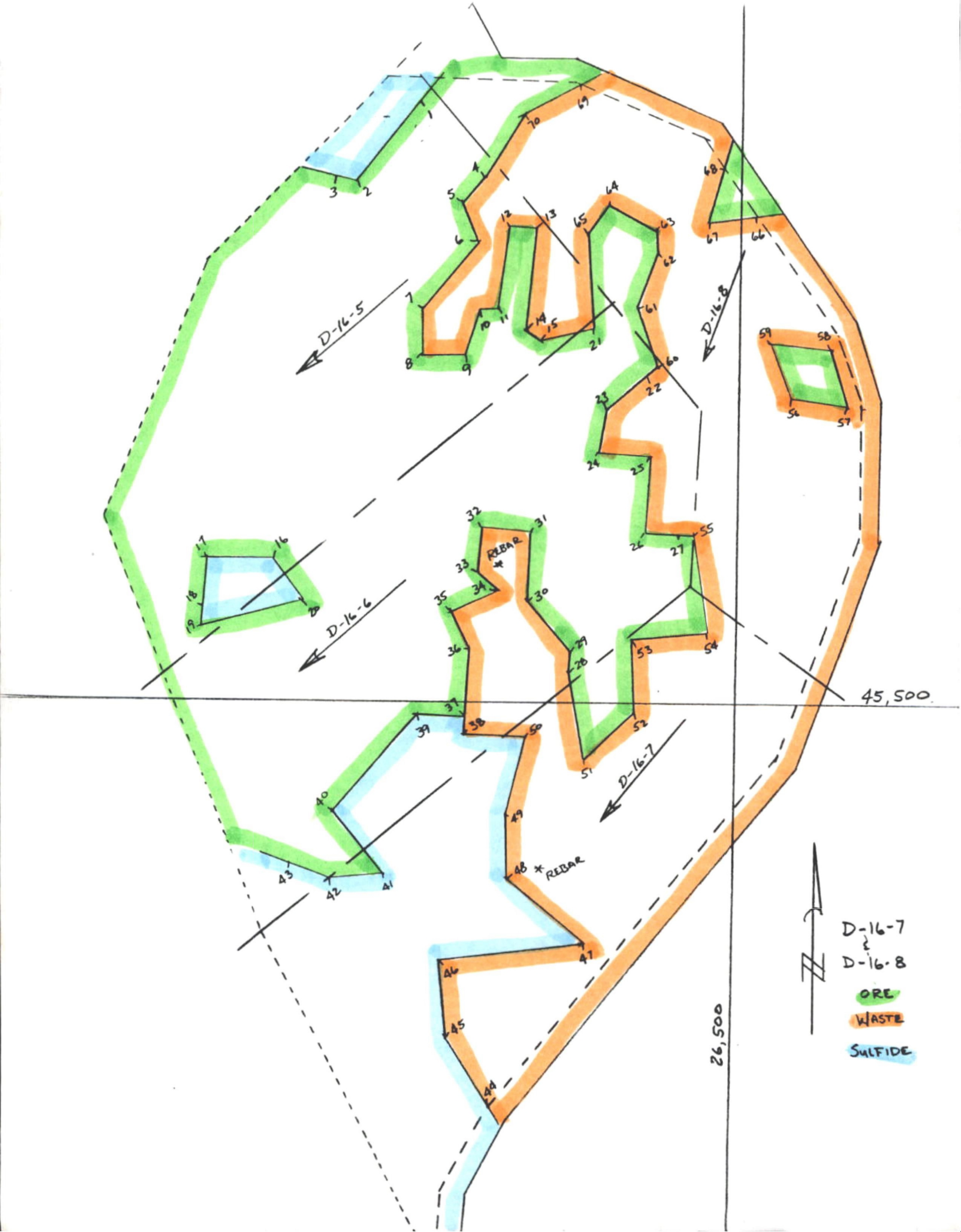
ORE
WASTE
MAYBE
SULFIDE
26,500
45,000


D-16-5
D-16-6
D-16-7
D-16-8
REBAR
REBAR
45,500
26,500
D-16-7
&
D-16-8
ORE
WASTE
SULFIDE

BY MG DATE 10/21/80 SUBJECT S-10-6 Ore Mod SHEET NO. ..... OF .....

CHKD. BY ..... DATE ..... JOB NO. .....

1" = 50'

Possible workings

37 10-31-88
527

32 10-31-88
526, 532

22 11/1 525, 316, 599, 472

82 11/2 524, 534

50 11/3 522, 535

53 11/3 582, 222

20 11/4 612

196 TOTAL

45000

19 - 10/25 601, 603
97 - 10/26, 91
32 - 10/26, 670
55 - 10/27, 461, 615, 631
46 10/27 661, 674, 676, 901
66 10/28 721, 912
49 10/28 732, 740

364 TOTAL HOLES

721	691	661	631	601	571	541	511	481	451	421	391	361	331	301	271	241	211	181	151	121	91	61	31	1		
722	692	662	632	602	572	542	512	482	452	422	392	362	332	302	272	242	212	182	152	122	92	62	32	2		
723	693	663	633	603	573	543	513	483	453	423	393	363	333	303	273	243	213	183	153	123	93	63	33	3		
724	694	664	634	604	574	544	514	484	454	424	394	364	334	304	274	244	214	184	154	124	94	64	34	4		
725	695	665	635	605	575	545	515	485	455	425	395	365	335	305	275	245	215	185	155	125	95	65	35	5		
726	696	666	636	606	576	546	516	486	456	426	396	366	336	306	276	246	216	186	156	126	96	66	36	6		
727	697	667	637	607	577	547	517	487	457	427	397	367	337	307	277	247	217	187	157	127	97	67	37	7		
728	698	668	638	608	578	548	518	488	458	428	398	368	338	308	278	248	218	188	158	128	98	68	38	8		
729	699	669	639	609	579	549	519	489	459	429	399	369	339	309	279	249	219	189	159	129	99	69	39	9		
730	700	670	640	610	580	550	520	490	460	430	400	370	340	310	280	250	220	190	160	130	100	70	40	10		
731	701	671	641	611	581	551	521	491	461	431	401	371	341	311	281	251	221	191	161	131	101	71	41	11		
732	702	672	642	612	582	552	522	492	462	432	402	372	342	312	282	252	222	192	162	132	102	72	42	12		
733	703	673	643	613	583	553	523	493	463	433	403	373	343	313	283	253	223	193	163	133	103	73	43	13		
734	704	674	644	614	584	554	524	494	464	434	404	374	344	314	284	254	224	194	164	134	104	74	44	14		
735	705	675	645	615	585	555	525	495	465	435	405	375	345	315	285	255	225	195	165	135	105	75	45	15		
736	706	676	646	616	586	556	526	496	466	436	406	376	346	316	286	256	226	196	166	136	106	76	46	16		
737	707	677	647	617	587	557	527	497	467	437	407	377	347	317	287	257	227	197	167	137	107	77	47	17		
738	708	678	648	618	588	558	528	498	468	438	408	378	348	318	288	258	228	198	168	138	108	78	48	18		
739	709	679	649	619	589	559	529	499	469	439	409	379	349	319	289	259	229	199	169	139	109	79	49	19		
740	710	680	650	620	590	560	530	500	470	440	410	380	350	320	290	260	230	200	170	140	110	80	50	20		
741	711	681	651	621	591	561	531	501	471	441	411	381	351	321	291	261	231	201	171	141	111	81	51	21		
742	712	682	652	622	592	562	532	502	472	442	412	382	352	322	292	262	232	202	172	142	112	82	52	22		
743	713	683	653	623	593	563	533	503	473	443	413	383	353	323	293	263	233	203	173	143	113	83	53	23		
744	714	684	654	624	594	564	534	504	474	444	414	384	354	324	294	264	234	204	174	144	114	84	54	24		
745	715	685	655	625	595	565	535	505	475	445	415	385	355	325	295	265	235	205	175	145	115	85	55	25		
746	716	686	656	626	596	566	536	506	476	446	416	386	356	326	296	266	236	206	176	146	116	86	56	26		
747	717	687	657	627	597	567	537	507	477	447	417	387	357	327	297	267	237	207	177	147	117	87	57	27		
748	718	688	658	628	598	568	538	508	478	448	418	388	358	328	298	268	238	208	178	148	118	88	58	28		
			659	629	599	569	539	509	479	449	419	389	359	329	299	269	239	209	179	149	119	89	59	29		
				630	600	570	540	510	480	450	420	390	360	330	300	270	240	210	180	150	120	90	60	30		

TOES
901-911
912 918
919 936

ROUNDUP POWDER COMPANY

DAKOTA DIVISION - STURGIS, SOUTH DAKOTA

"SERVICE IS OUR FIRST PRODUCT"

D.H. BLATTNER & SONS
BROHM/GILT EDGE MINING PROJECT

DRILL & BLAST RECORD

Blast Number 311B

Name of blaster Randy Russell

Date 5-4-92

Time of blast 5:10 P.M.

BLAST DATA

Location Sunday Pit

Level 5-20-3

Type of material Ore/Waste

Type of Pattern: Square [X] Staggered [ ]

	Production	Highwall / Toe
Hole Diameter	6½"	6½"
Burden	13'	10.5
Spacing	15'	11
Hole depth	23'	23'
Subdrill	3'	3'
Stem Length	10' - 14'	12' Deck 7'
Stem Material	1" conn rock	1" conn rock
Cu/Yd per hole	125.18	85.55
Number of Holes	151	53
Avg. Lbs. per hole	120#	60#

	DRY	WET	TOTAL
Total Number of Holes	10	194	204

Total Cubic Yards This Shot 23,436 yd.³ Overall Powder Factor .8

ATMOSPHERIC CONDITIONS

Temperature 75°F Wind 10-15 mph Sky Conditions Clear

Comments:

ROUNDUP POWDER COMPANY

DAKOTA DIVISION - STURGIS, SOUTH DAKOTA

"SERVICE IS OUR FIRST PRODUCT"

D.H. BLATTNER & SONS
BROHM/GILT EDGE MINING PROJECT

DRILL & BLAST RECORD

Blast Number 312 B

Name of blaster Kevin Collins

Date 5-8-92

Time of blast 12:10 P.m.

BLAST DATA

Location Sunday Pit

Level 5-20-4

Type of material ORE/waste

Type of Pattern: Square [ ] Staggered [✓]

	Production	Highwall / Toe
Hole Diameter	6 1/2"	6 1/2"
Burden	13'	10.5'
Spacing	13'	11'
Hole depth	20'	20'
Subdrill	3'	3'
Stem Length	10'-16'	5' Deck 12'
Stem Material	1" Conn.	1" Conn.
Cu/Yd per hole	125.18	85.18
Number of Holes	229	87
Avg. Lbs. per hole	130#	60#

	DRY	WET	TOTAL
Total Number of Holes	0	256	256

Total Cubic Yards This Shot 30,966

Overall Powder Factor 1.14

ATMOSPHERIC CONDITIONS

Temperature 80°

Wind Calm

Sky Conditions Clear

Comments: Shot was all wet, had a few holes that were a little short, but nothing too serious. Had 5 redrills