

David A. Odt, M.Sc.  
221 South Third Avenue  
Bozeman, Montana 59715  
(406) 585-2687

**ORE RESERVE STUDY  
OF THE  
ZENDA PROJECT  
KERN COUNTY, CALIFORNIA**

*Prepared For*

**Saga Exploration Company  
Reno, Nevada**

*Prepared By*

**David Odt  
Bozeman, Montana**

*Date*

**20 December 96**

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## Summary

The author was commissioned by Saga Exploration Company to calculate ore reserves at the Zenda project, Kern County, California. The evaluation included:

- Creation of a rock model and grade model based on cross section modeling
- Transfer of grade model limits to a bench plan model
- Measuring of area>volume>tonnage of bench plan and cross section grade models
- Open pit design and calculation of strip tons

The following chart summarizes Zenda ore reserves from a variety of sources.

Ore reserve source	Ore Tons	Average Grade, OPT Au	Contained oz. Au	Stripping Ratio
PAH (1990), Computer Model	1,088,000	.047		1.18 : 1
Equinox, Cross Section	920,575	.057		1.33 : 1
Odt, 1995, Cross Section, Geologic Resource	833,000	n/a		n/a
Odt, 1996, Cross Section, Geologic Resource	878,328	.053		n/a
Odt, 1996, Bench Plan (3260), Mineable Reserve	868,016	.051	44,485	1.6 : 1
Odt, 1996, Bench Plan (3300), Mineable Reserve	840,661	.052	43,353	1.5 : 1
Odt, 1996, Bench Plan (3340), Mineable Reserve	788,909	.053	41,026	0.99 : 1
Odt, 1996, Bench Plan (3380), Mineable Reserve	710,797	.053	36,455	0.88 : 1

## Conclusions

1. Ore reserves from this study are 5 % below Equinox's estimate, and 21 % below Pincock Allen Holt's computer-generated ore reserve assessment (Addison, et al, 1990).
2. Average gold grade as defined in this study is 7 % less than Equinox's measurement, and 21 % above Pincock Allen Holt's estimate (Addison, et al, 1990).
3. Strip ratio in this study is estimated at 1.6 : 1 for the deepest modeled pit, and 0.88 : 1 for the shallowest modeled pit.

Ore tonnage discrepancies are attributed to:

- PAH modeled significantly more ore than the author at the east end of the deposit
- PAH modeled substantially more ore deep in the deposit.

## Recommendations

- Carefully study the bench plans and select gaps for in-fill drilling.
- Continue drilling at the east end of the deposit to confirm or reject PAH's ore estimates.
- Perform infill drilling on xc-15, and at the west end of the deposit.

# Methodology

## ***Grade and Rock Model: Cross Section***

A series of 25 NE-trending cross sections were constructed along the strike of the deposit, perpendicular to the trend of mineralization. Cross section panel thickness was 50 feet. A series of seventeen cross sections (xc-5 to xc-21) were employed in the modeling. Figure 1 shows cross section locations and figures 2 to 18 show the grade model cross sections.

A rock model of lithology and alteration was first constructed in cross section. The grade model was then constructed, using rock model limits to guide the placement of ore grade areas in cross section.

Adjacent panels were used for interpolation of ore limits on cross sections that lack sufficient drill data.

## ***Grade Model: Cross Section > Bench Plan***

The cross section grade model was used to create a preliminary bench plan ore outline on each 20 foot bench. These outlines were slightly modified to best fit all bench composite assay locations. An isometric view of all bench ore outlines is shown on figure 19, and each bench ore plan is shown on figures 20 to 40.

## ***Ore Tonnage Calculations***

Ore areas were measured on both cross section and bench plan models. Volumes were calculated, and tonnages were generated using a tonnage factor of 13.4 cubic feet per ton. Table 1 shows calculated tonnages from cross section measurements. Table 2 displays calculated tonnages from the bench plan model.

## ***Open Pit Plan***

An ultimate pit bottom of 3260 feet was established based on the notable drop-off in ore measured below this elevation. Parameters for pit modeling include the application of a 50 degree highwall and a ten foot set-back from the modeled ore footwall on each bench.

Three additional pit models were generated using higher ultimate pit toes: 3300, 3340 and 3380 feet elevation. This reduced ore tonnages and also lowered the strip ratio.

After pit modeling, total area for each bench was measured. Ore tons and waste+ low grade tons for each modeled pit are shown on Tables 3 to 6.

## ***Estimation of Average Grade***

***Method 1.*** The Zenda assay database was edited to contain only the assays from within the modeled ore area. Over 650 assays from drillholes, surface and subsurface channel samples comprise this database. The average was calculated to be .053 opt gold.

***Method 2.*** For the bench plan model, an average grade was calculated by averaging all assays on each bench. This average was used for calculation of contained ounces Au in the pit models. Results of the grade modeling by bench are shown on Table 7.

## **Bibliography**

Addison, Stevens, Stinnett and Tschabrun, 1990, Audit of the Zenda gold project feasibility study: prepared for Equinox Resources Ltd. by Pincock Allen & Holt, Denver, Colorado.

Odt, 1995, Evaluation of the Zenda project: in-house report for Saga Exploration Co.

<b>table 1.</b>							
Zenda ore reserve calculations: Geologic Resource							
Method: cross section							
Date: 25 NOV 96							
By: D.Odt							
For: Saga Exploration Co.							
section	ore area	L. G.+ore area	low grade area	ore vol	L.G. vol	ore ton	L.G. ton
5	2810	31592	28782	140500	1439100	10485	107396
6	11066	42619	31553	553300	1577650	41291	117735
7	16470	54789	38319	823500	1915950	61455	142981
8	26703	92194	65491	1335150	3274550	99638	244369
9	27453	75030	47577	1372650	2378850	102437	177526
10	27469	61545	34076	1373450	1703800	102496	127149
11	22818	46880	24062	1140900	1203100	85142	89784
12	22924	44103	21179	1146200	1058950	85537	79026
13	15937	28318	12381	796850	619050	59466	46198
14	19990	30315	10325	999500	516250	74590	38526
15		28666	28666	0	1433300	0	106963
16	10143	27638	17495	507150	874750	37847	65280
17	10494	31254	20760	524700	1038000	39157	77463
18	8939	34571	25632	446950	1281600	33354	95642
19	4702	23608	18906	235100	945300	17545	70545
20	4927	20173	15246	246350	762300	18384	56888
21	2547	11022	8475	127350	423750	9504	31623
				<b>totals</b>	<b>878328</b>	<b>1675093</b>	<b>tons</b>
					<b>ore</b>	<b>low grade</b>	
Note: No ore was modeled on cross section 15 due to lack of drill data.							
Note: Additional drilling is needed on sections 13 and 18 to up-grade to drill-indicated.							
Note: Additional drilling is recommended on xc 5, 15 and 21, and to NW and SE.							

<b>table 2.</b>						
Zenda ore reserve calculations						
Method: Bench plan						
Date: 25 NOV 96						
By: D. Odt						
For: Saga Exploration Co.						
Units: feet, tonnage factor = 13.4 cu.ft./ton						
<b>bench</b>	<b>ore area</b>	<b>ore vol</b>	<b>ore tons</b>	<b>low grade area</b>	<b>low grade vol</b>	<b>low grade tons</b>
3660	768	15360	1146	584	11680	872
3640	2240	44800	3343	1062	21240	1585
3620	1760	35200	2627	2091	41820	3121
3600	4269	85380	6372	3495	69900	5216
3580	7195	143900	10739	4117	82340	6145
3560	15709	314180	23446	5087	101740	7593
3540	28157	563140	42025	8590	171800	12821
3520	36293	725860	54169	15086	301720	22516
3500	45281	905620	67584	32165	643300	48007
3480	58743	1174860	87676	39510	790200	58970
3460	63504	1270080	94782	50936	1018720	76024
3440	69401	1388020	103584	66266	1325320	98904
3420	53747	1074940	80219	77456	1549120	115606
3400	46661	933220	69643	125962	2519240	188003
3380	42506	850120	63442	83930	1678600	125269
3360	28434	568680	42439	99348	1986960	148281
3340	23901	478020	35673	112141	2242820	167375
3320	14186	283720	21173	117025	2340500	174664
3300	20488	409760	30579	102588	2051760	153116
3280	11020	220400	16448	101396	2027920	151337
3260	7308	146160	10907	59637	1192740	89010
3240	770	15400	1149	42626	852520	63621
3220	584	11680	872	14866	297320	22188
		<i>tons</i>	<b>870037</b>		<i>tons</i>	<b>1740245</b>
		<i>ore</i>			<i>low grade</i>	





**table 4.**

Zenda pit tonnage calculations: 3300 ultimate bench toe

Method: Bench Plan

Date: 25 NOV 96

For: Saga Exploration Co.

Bench	Total area	ore area	waste+L.G. area	ore vol	waste+L.G. vol	ore tons	waste+L.G. tons
3660	1356	768	588	15360	11760	1146	878
3640	3846	2240	1606	44800	32120	3343	2397
3620	4949	1760	3189	35200	63780	2627	4760
3600	8730	4269	4461	85380	89220	6372	6658
3580	12609	7195	5414	143900	108280	10739	8081
3560	22328	15709	6619	314180	132380	23446	9879
3540	35055	28157	6898	563140	137960	42025	10296
3520	47433	36293	11140	725860	222800	54169	16627
3500	81976	45281	36695	905620	733900	67584	54769
3480	110897	58743	52154	1174860	1043080	87676	77842
3460	134315	63504	70811	1270080	1416220	94782	105688
3440	149262	69401	79861	1388020	1597220	103584	119196
3420	154698	53747	100951	1074940	2019020	80219	150673
3400	148110	46661	101449	933220	2028980	69643	151416
3380	142738	42506	100232	850120	2004640	63442	149600
3360	124116	28434	95682	568680	1913640	42439	142809
3340	104902	23901	81001	478020	1620020	35673	120897
3320	76620	14186	62434	283720	1248680	21173	93185
3300	45010	20488	24522	409760	490440	30579	36600
					<b>ore tons</b>		<b>840661</b>
					<b>waste+L.G. tons</b>		<b>1262249</b>
					<b>waste+L.G./ore ratio</b>		<b>1.5 : 1</b>

<b>table 5.</b>							
Zenda pit tonnage calculations: <b>3340 ultimate bench toe</b>							
Method: Bench Plan							
Date: 25 NOV 96							
For: Saga Exploration Co.							
Bench	Total area	ore area	waste+L.G. area	ore vol	waste+L.G. vol	ore tons	waste+L.G. tons
3660	1356	768	588	15360	11760	1146	878
3640	3846	2240	1606	44800	32120	3343	2397
3620	4949	1760	3189	35200	63780	2627	4760
3600	8730	4269	4461	85380	89220	6372	6658
3580	12609	7195	5414	143900	108280	10739	8081
3560	22328	15709	6619	314180	132380	23446	9879
3540	35055	28157	6898	563140	137960	42025	10296
3520	47433	36293	11140	725860	222800	54169	16627
3500	81270	45281	35989	905620	719780	67584	53715
3480	104239	58743	45496	1174860	909920	87676	67904
3460	122453	63504	58949	1270080	1178980	94782	87984
3440	132572	69401	63171	1388020	1263420	103584	94285
3420	133316	53747	79569	1074940	1591380	80219	118760
3400	120848	46661	74187	933220	1483740	69643	110727
3380	103500	42506	60994	850120	1219880	63442	91036
3360	75535	28434	47101	568680	942020	42439	70300
3340	41979	23901	18078	478020	361560	35673	26982
						<b>ore tons</b>	<b>788909</b>
						<b>waste+L.G. tons</b>	<b>781267</b>
						<b>waste+L.G./ore ratio</b>	<b>0.99 : 1</b>

<b>table 6.</b>							
<b>Zenda pit tonnage calculations: 3380 ultimate bench toe</b>							
<b>Method: Bench Plan</b>							
<b>Date: 25 NOV 96</b>							
<b>For: Saga Exploration Co.</b>							
<b>Bench</b>	<b>Total area</b>	<b>ore area</b>	<b>waste+L.G. area</b>	<b>ore vol</b>	<b>waste+L.G. vol</b>	<b>ore tons</b>	<b>waste+L.G. tons</b>
3660	1356	768	588	15360	11760	1146	878
3640	3846	2240	1606	44800	32120	3343	2397
3620	4949	1760	3189	35200	63780	2627	4760
3600	8730	4269	4461	85380	89220	6372	6658
3580	12609	7195	5414	143900	108280	10739	8081
3560	22328	15709	6619	314180	132380	23446	9879
3540	35055	28157	6898	563140	137960	42025	10296
3520	47433	36293	11140	725860	222800	54169	16627
3500	101544	45281	56263	905620	1125260	67584	83975
3480	111496	58743	52753	1174860	1055060	87676	78736
3460	115673	63504	52169	1270080	1043380	94782	77864
3440	124151	69401	54750	1388020	1095000	103584	81716
3420	122304	53747	68557	1074940	1371140	80219	102324
3400	104823	46661	58162	933220	1163240	69643	86809
3380	79926	42506	37420	850120	748400	63442	55851
						<b>ore tons</b>	<b>710797</b>
						<b>waste+L.G. tons</b>	<b>626849</b>
						<b>waste+L.G./ore ratio</b>	<b>0.88 : 1</b>

<b>table 7.</b>						
<b>Zenda average grade by bench and contained oz. Au</b>						
Method: Bench plan						
Date: 25 NOV 96						
By: D. Odt						
For: Saga Exploration Co.						
bench	ore area	ore vol	ore tons	avg grade	contained oz.	# smpl on bench
3660	768	15360	1146	0.053	61	0
3640	2240	44800	3343	0.053	177	0
3620	1760	35200	2627	0.053	139	0
3600	4269	85380	6372	0.053	338	0
3580	7195	143900	10739	0.053	569	3
3560	15709	314180	23446	0.049	1149	10
3540	28157	563140	42025	0.081	3404	6
3520	36293	725860	54169	0.055	2979	14
3500	45281	905620	67584	0.053	3582	16
3480	58743	1174860	87676	0.064	5611	18
3460	63504	1270080	94782	0.051	4834	18
3440	69401	1388020	103584	0.044	4558	16
3420	53747	1074940	80219	0.045	3610	14
3400	46661	933220	69643	0.039	2716	17
3380	42506	850120	63442	0.043	2728	10
3360	28434	568680	42439	0.064	2716	10
3340	23901	478020	35673	0.052	1855	6
3320	14186	283720	21173	0.042	889	9
3300	20488	409760	30579	0.047	1437	3
3280	11020	220400	16448	0.039	641	4
3260	7308	146160	10907	0.045	491	3
<b>3260 ultimate bench:</b>		<b>tons</b>	<b>868016</b>			
			<b>grade</b>	<b>0.051</b>		
			<b>contained oz. Au</b>		<b>44485</b>	
<b>3300 ultimate bench:</b>		<b>tons</b>	<b>840661</b>			
			<b>grade</b>	<b>0.052</b>		
			<b>contained oz. Au.</b>		<b>43353</b>	
<b>3340 ultimate bench:</b>		<b>tons</b>	<b>788909</b>			
			<b>grade</b>	<b>0.053</b>		
			<b>contained oz. Au</b>		<b>41026</b>	
<b>3380 ultimate bench:</b>		<b>tons</b>	<b>710797</b>			
			<b>grade</b>	<b>0.053</b>		
			<b>contained oz. Au</b>		<b>36455</b>	

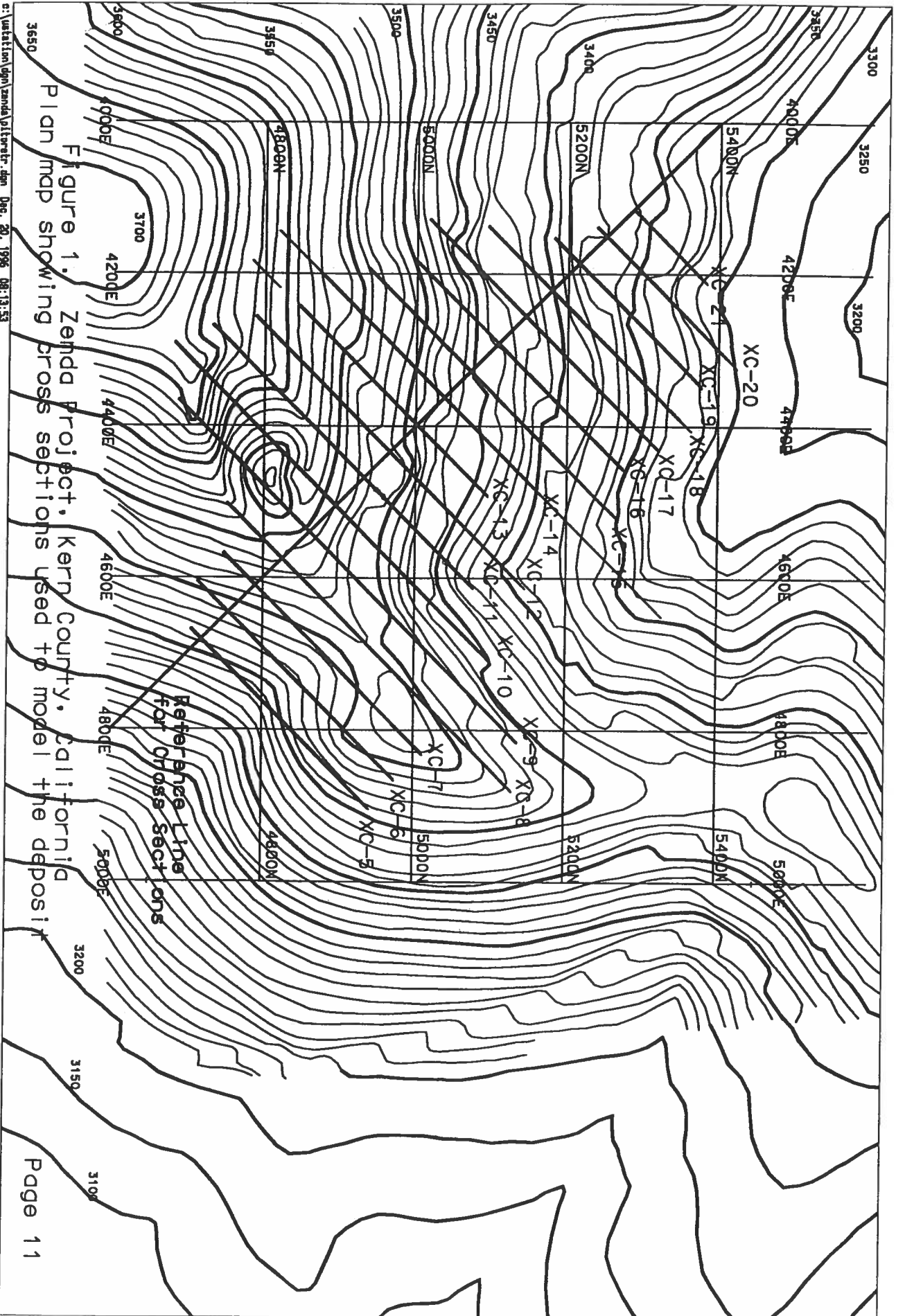


Figure 1. Zenda Project, Kern County, California  
 Plan map showing cross sections used to model the deposit

Figure 2. Zenda Project, Kern County, California

Grade Model  
Cross Section 5

Blue cross-hatched = ore  
Green hatched = low grade  
Topography is solid line  
Pit profile is dashed line

By: David A. Ddt  
For: Saga Exploration Co.  
Date: 18 DEC 96

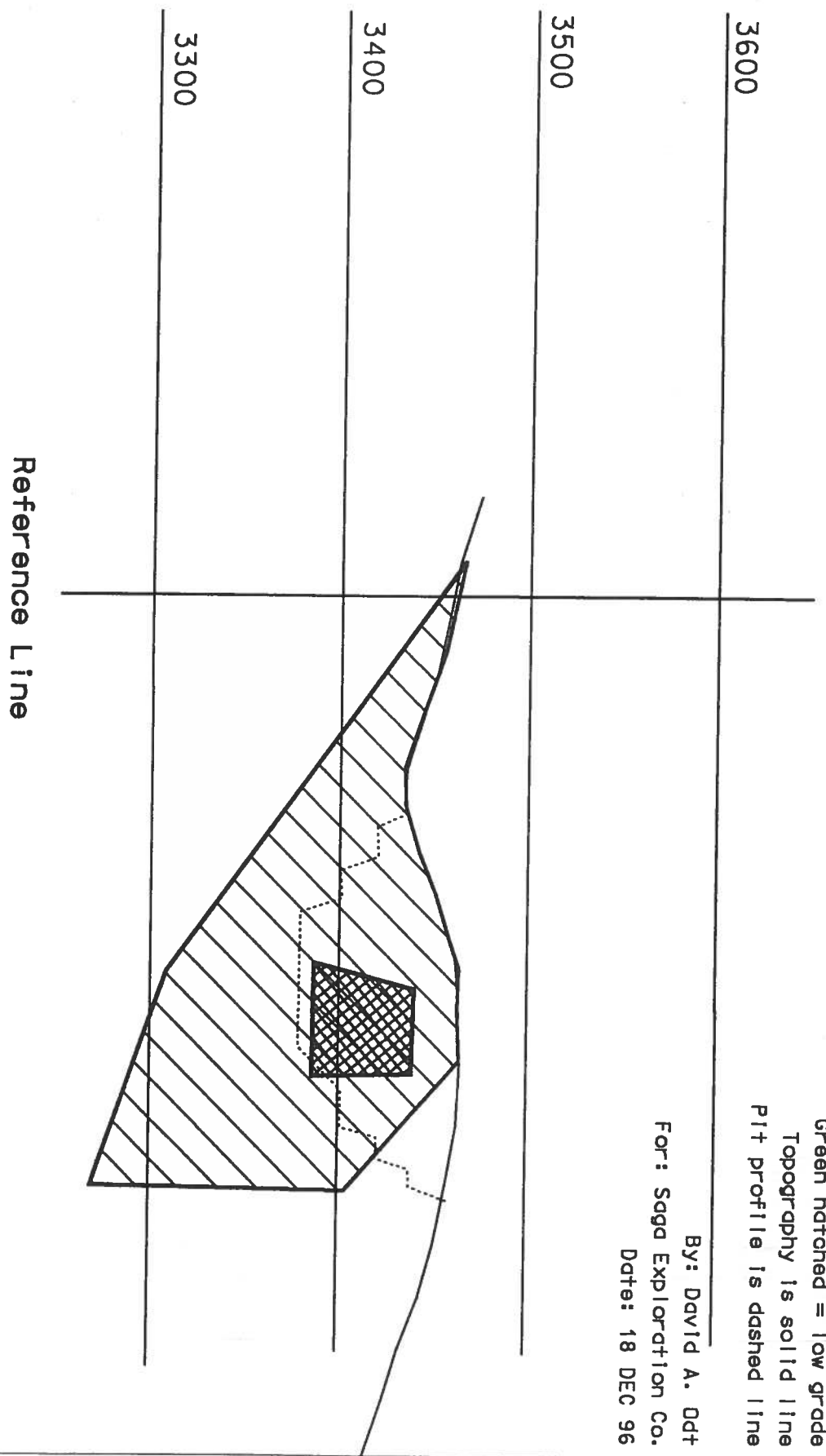


Figure 3. Zenda Project, Kern County, California  
Grade Model  
Cross Section 6

Blue cross-hatched = ore  
Green hatched = low grade  
Topography is solid line  
Pit profile is dashed line

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For: Saga Exploration Co.  
Date: 18 DEC 96

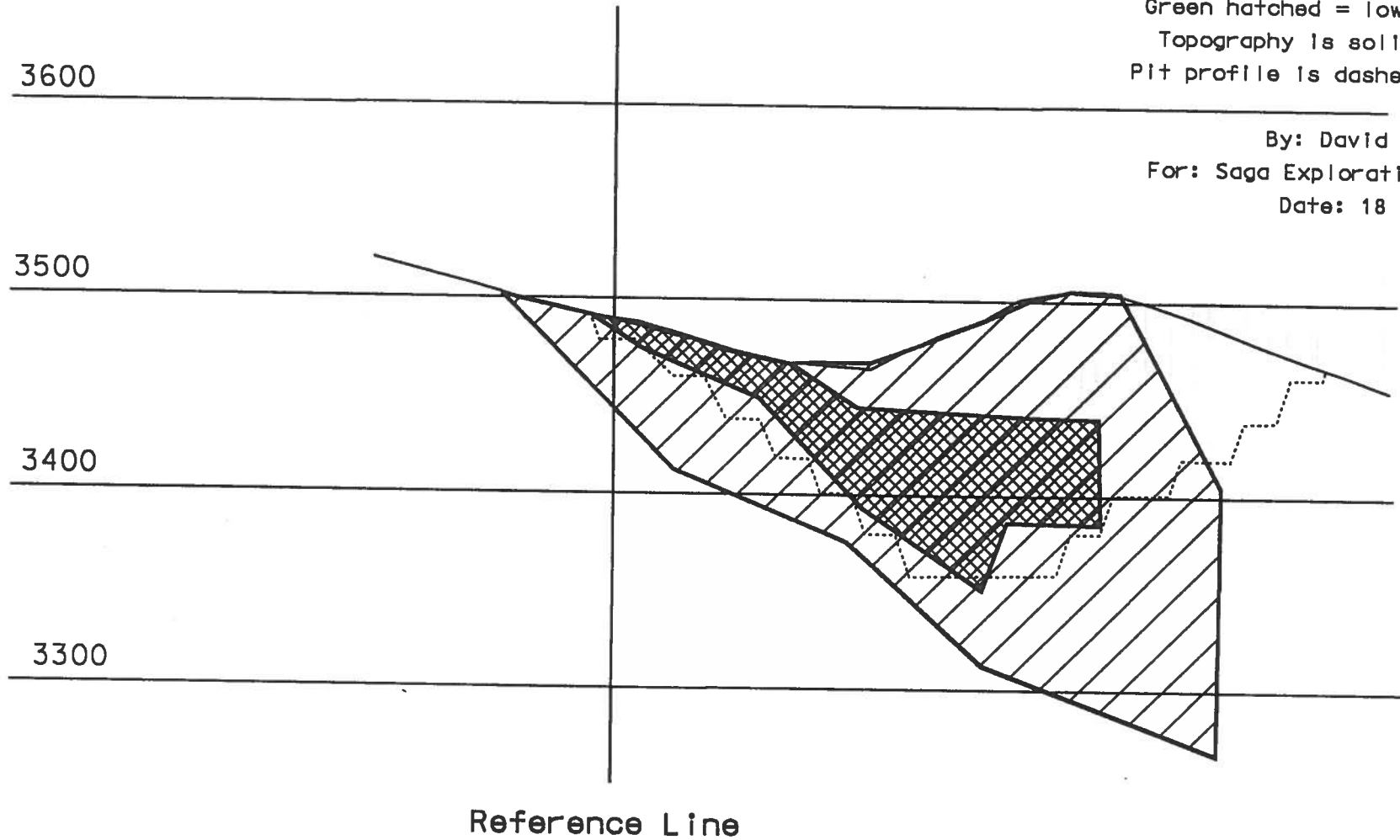


Figure 4. Zenda Project, Kern County, California  
Grade Model  
Cross Section 7

Blue cross-hatched = ore  
Green hatched = low grade  
Topography is solid line  
Pit profile is dashed line

By: David A. Odt  
For: Saga Exploration Co.  
Date: 18 DEC 96

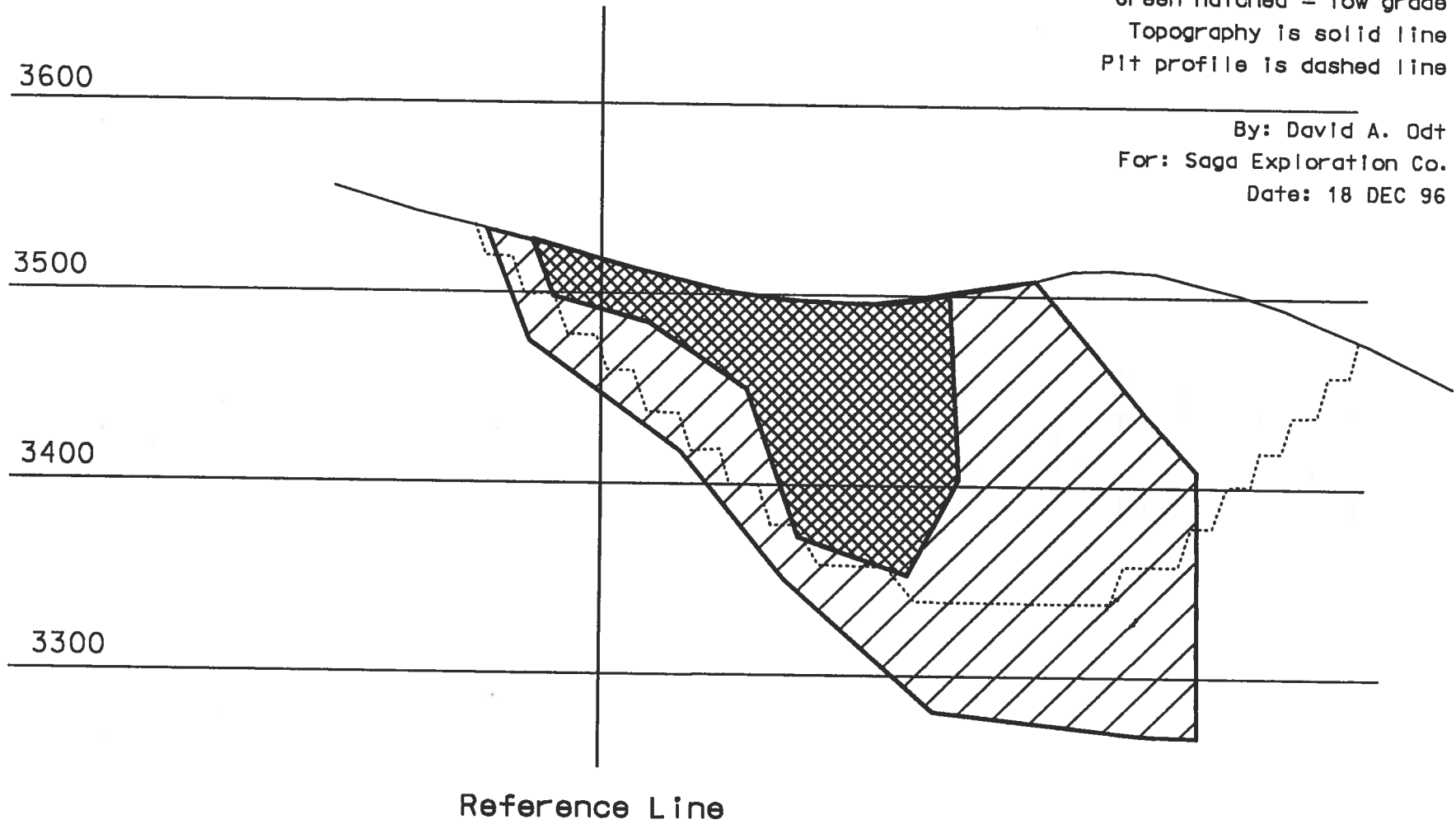




Figure 5. Zenda Project, Kern County, California  
Grade Model  
Cross Section 8

Blue cross-hatched = ore  
Green hatched = low grade  
Topography is solid line  
Pit profile is dashed line

By: David A. Odt  
For: Saga Exploration Co.  
Date: 18 DEC 96

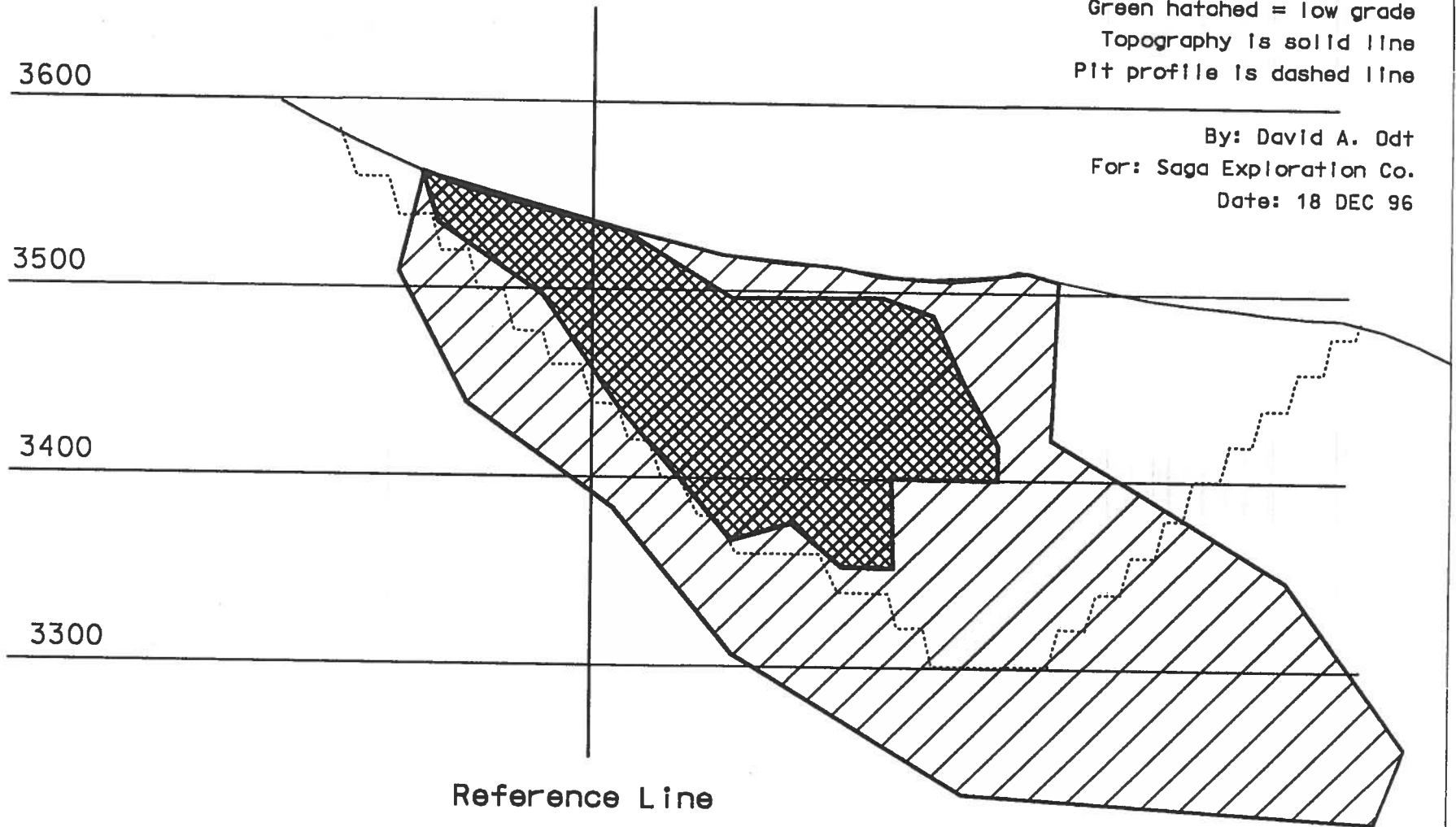


Figure 6. Zenda Project, Kern County, California

Grade Model  
Cross Section 9

Blue cross-hatched = ore  
Green hatched = low grade  
Topography is solid line  
Pit profile is dashed line

By: David A. Odt  
For: Sagg Exploration Co.  
Date: 18 DEC 96

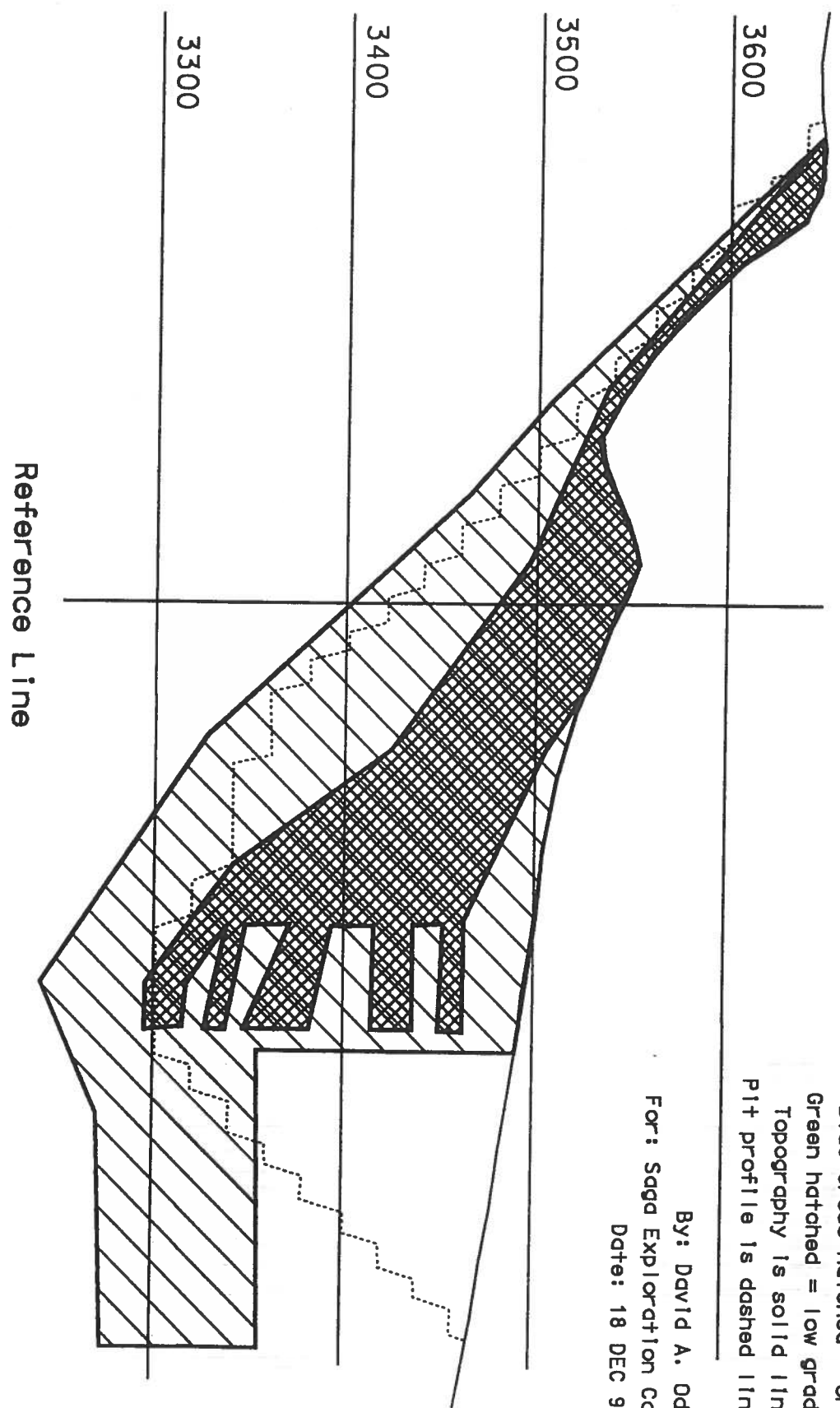
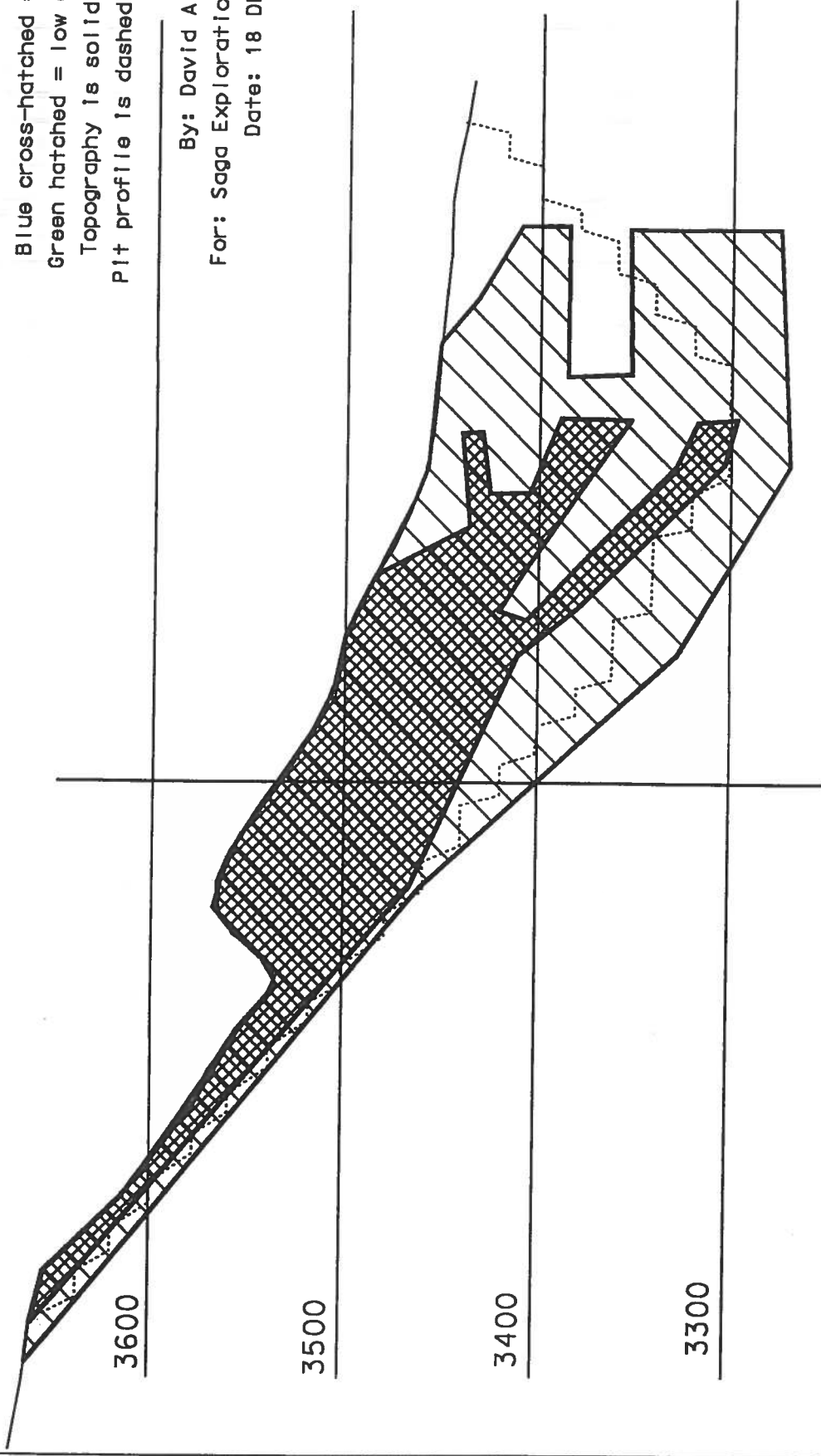


Figure 7. Zenda Project, Kern County, California  
Grade Model  
Cross Section 10

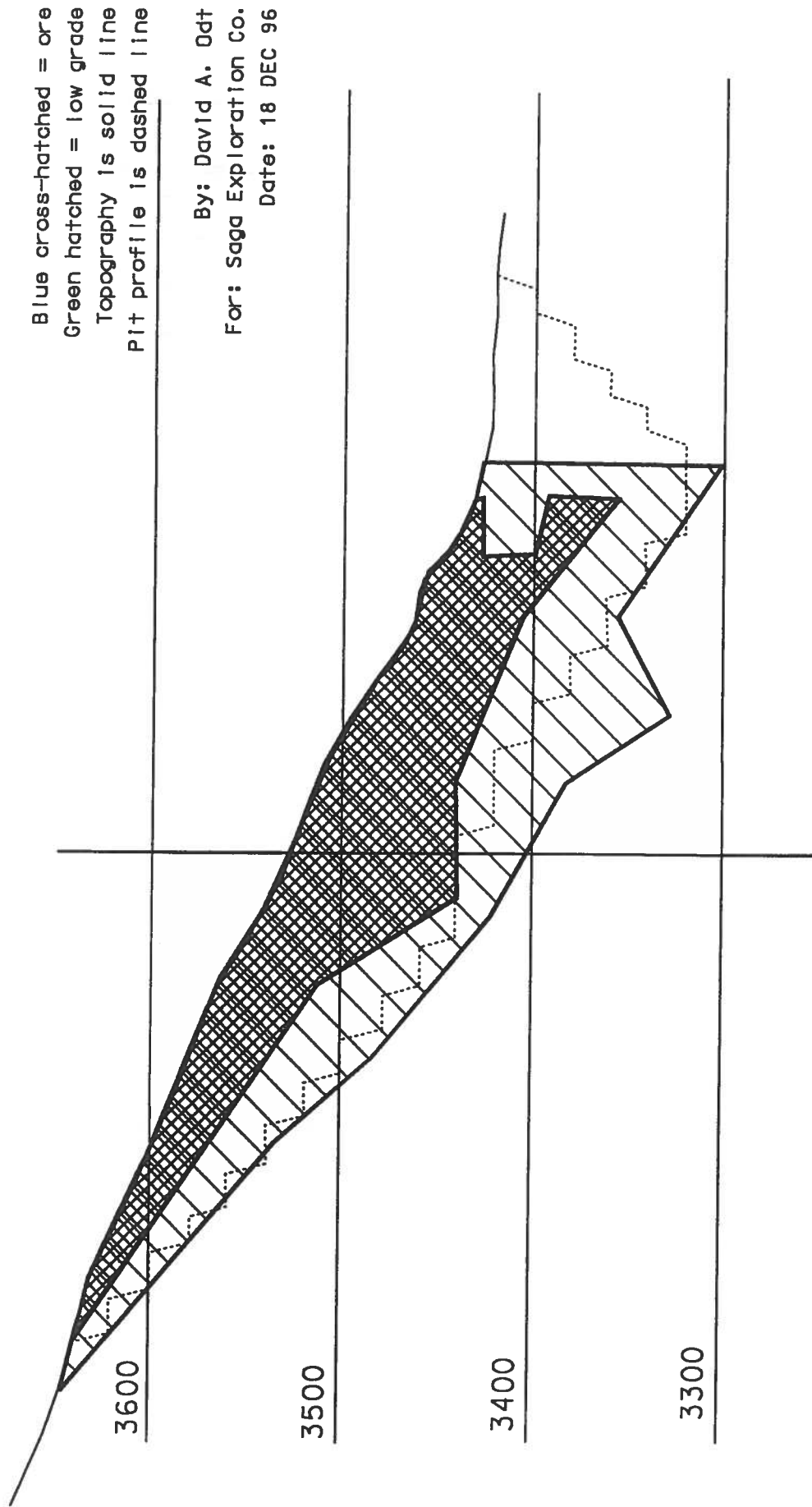
Blue cross-hatched = ore  
Green hatched = low grade  
Topography is solid line  
Pit profile is dashed line

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For: Saga Exploration Co.  
Date: 18 DEC 96



Reference Line

Figure 8. Zenda Project, Kern County, California  
Grade Model  
Cross Section 11



Blue cross-hatched = ore  
Green hatched = low grade  
Topography is solid line  
Pit profile is dashed line

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For: Saga Exploration Co.  
Date: 18 DEC 96

Reference Line

Figure 9. Zenda Project, Kern County, California  
Grade Model  
Cross Section 12

Blue cross-hatched = ore  
Green hatched = low grade  
Topography is solid line  
Pit profile is dashed line

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For: Saga Exploration Co.  
Date: 18 DEC 96

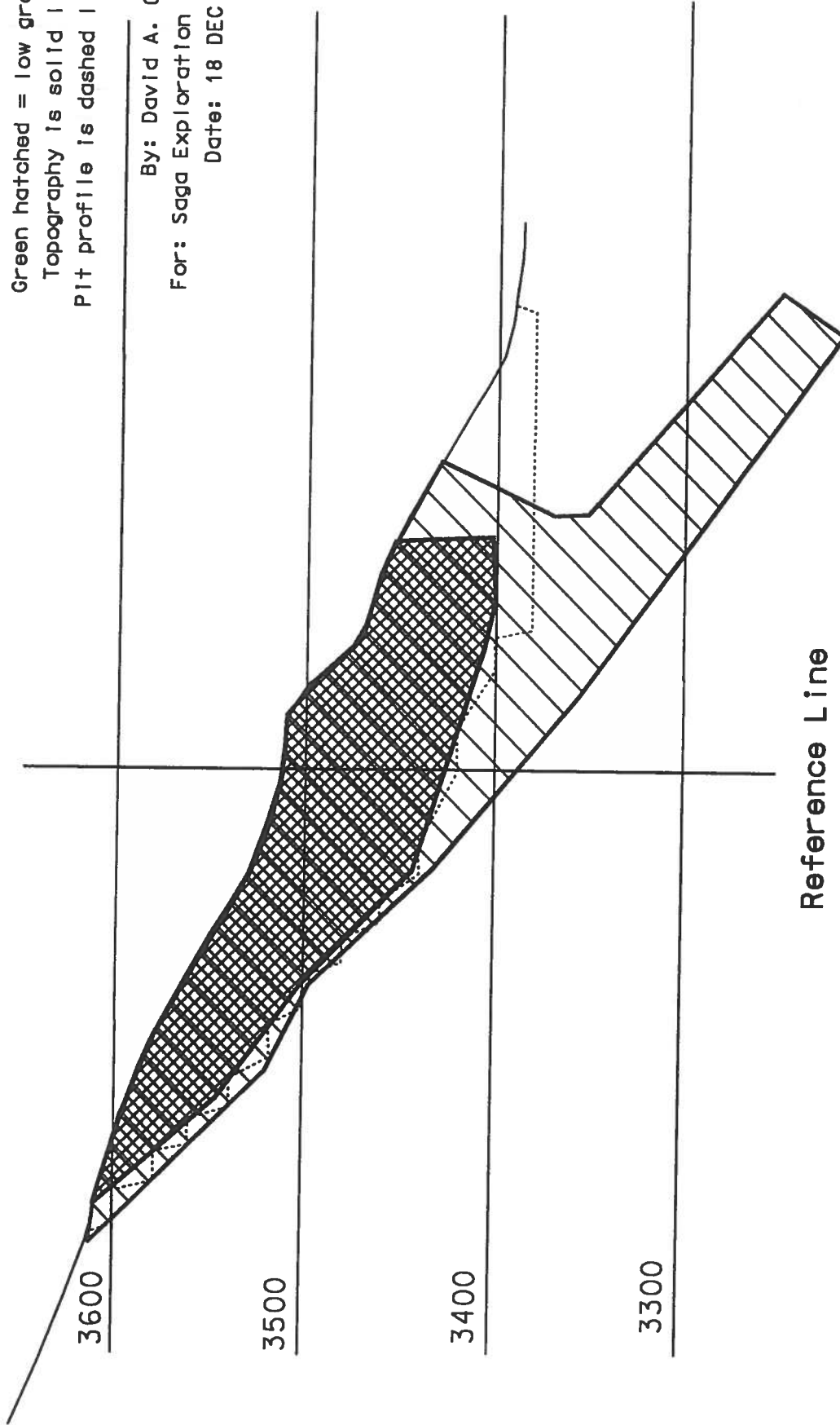
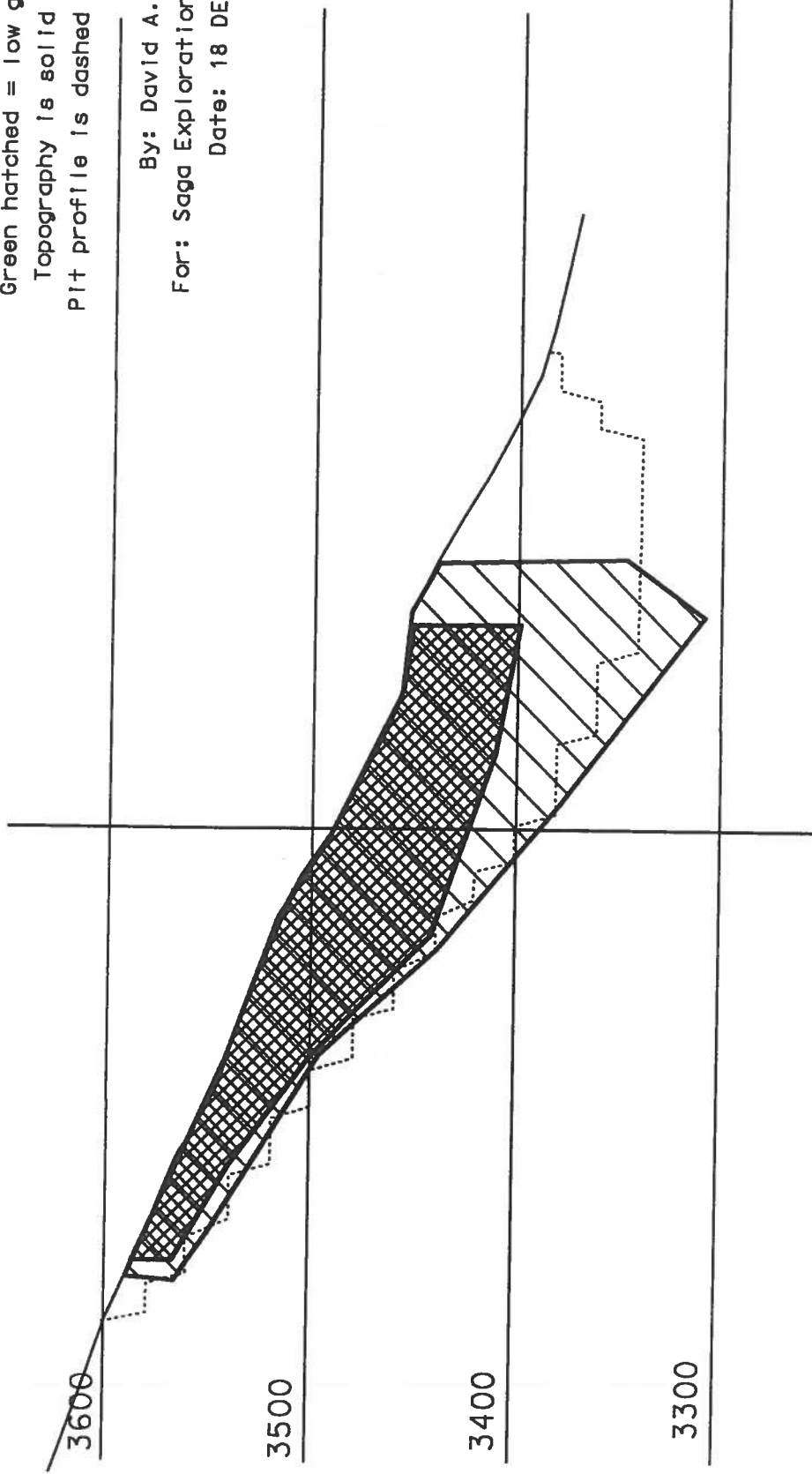


Figure 10. Zenda Project, Kern County, California  
Grade Model  
Cross Section 13

Blue cross-hatched = ore  
Green hatched = low grade  
Topography is solid line  
Pit profile is dashed line

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For: Saga Exploration Co.  
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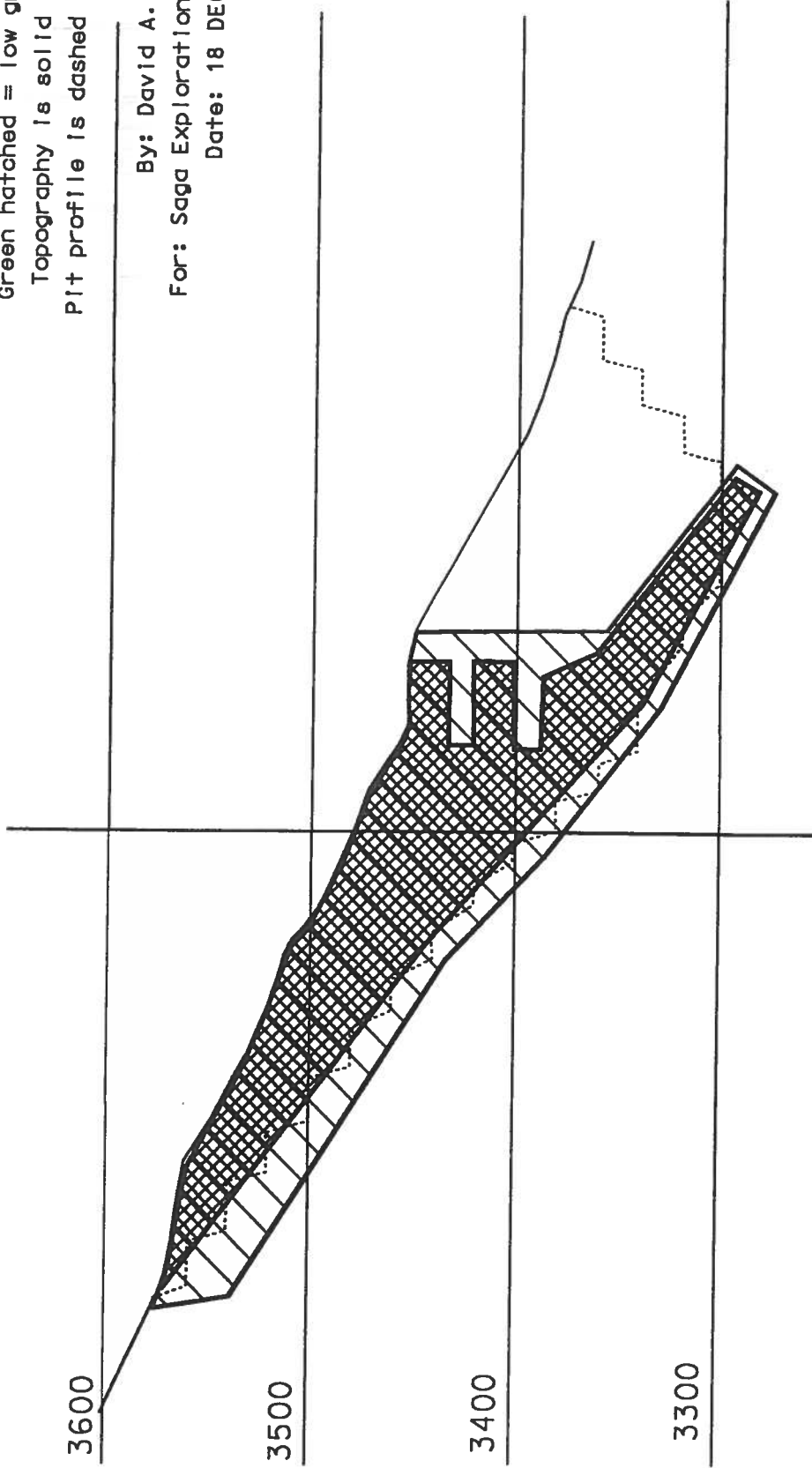


Reference Line

Figure 11. Zenda Project, Kern County, California  
Grade Model  
Cross Section 14

Blue cross-hatched = ore  
Green hatched = low grade  
Topography is solid line  
Pit profile is dashed line

By: David A. Odt  
For: Saga Exploration Co.  
Date: 18 DEC 96



Reference Line

Figure 12. Zenda Project, Kern County, California  
Grade Model  
Cross Section 15

Green hatched = low grade  
Topography is solid line  
Pit profile is dashed line

By: David A. Odt  
For: Saga Exploration Co.  
Date: 18 DEC 96

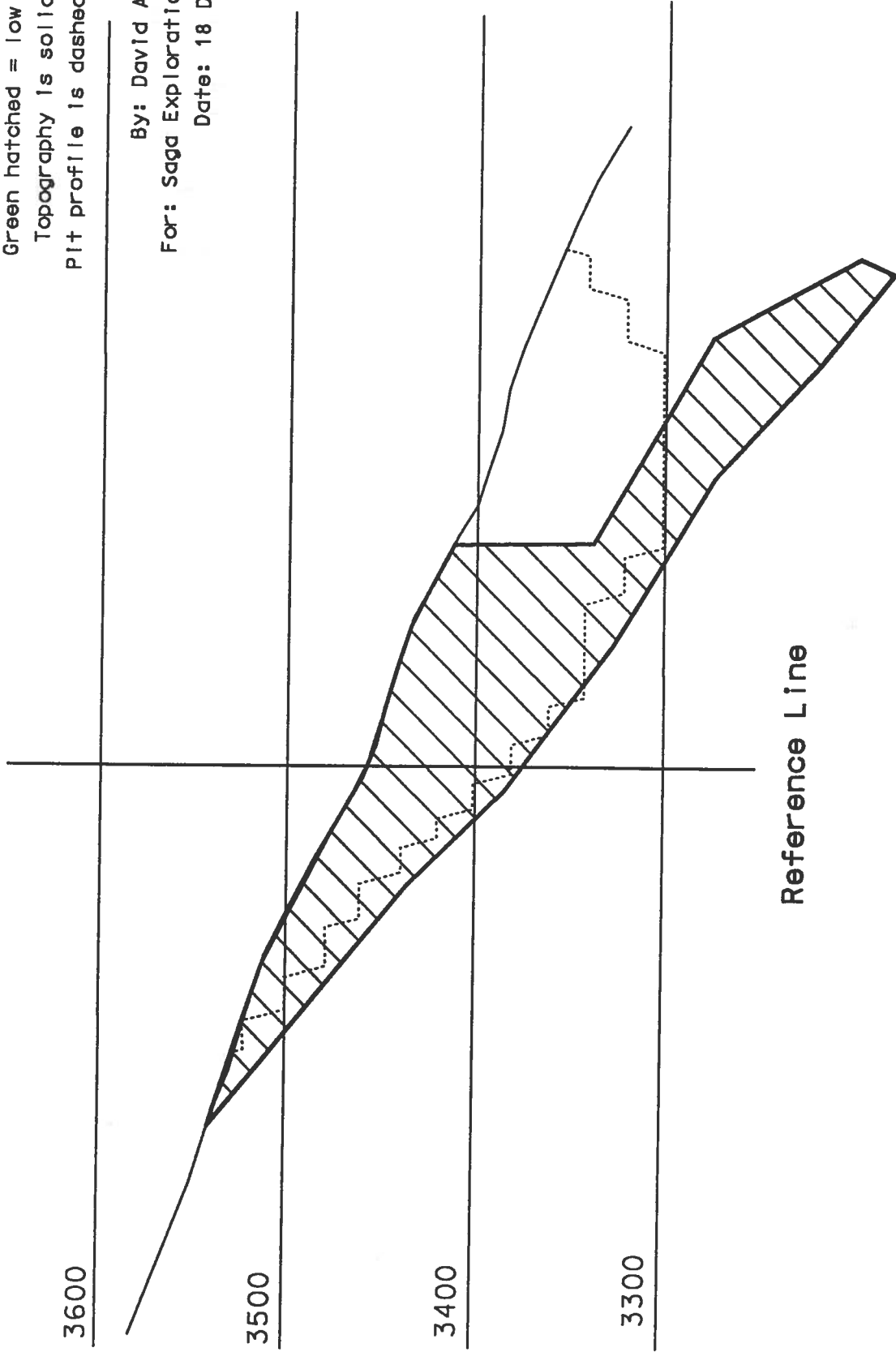




Figure 13. Zenda Project, Kern County, California  
Grade Model  
Cross Section 16

Blue cross-hatched = ore  
Green hatched = low grade  
Topography is solid line  
Pit profile is dashed line

By: David A. Odt  
For: Saga Exploration Co.  
Date: 18 DEC 96

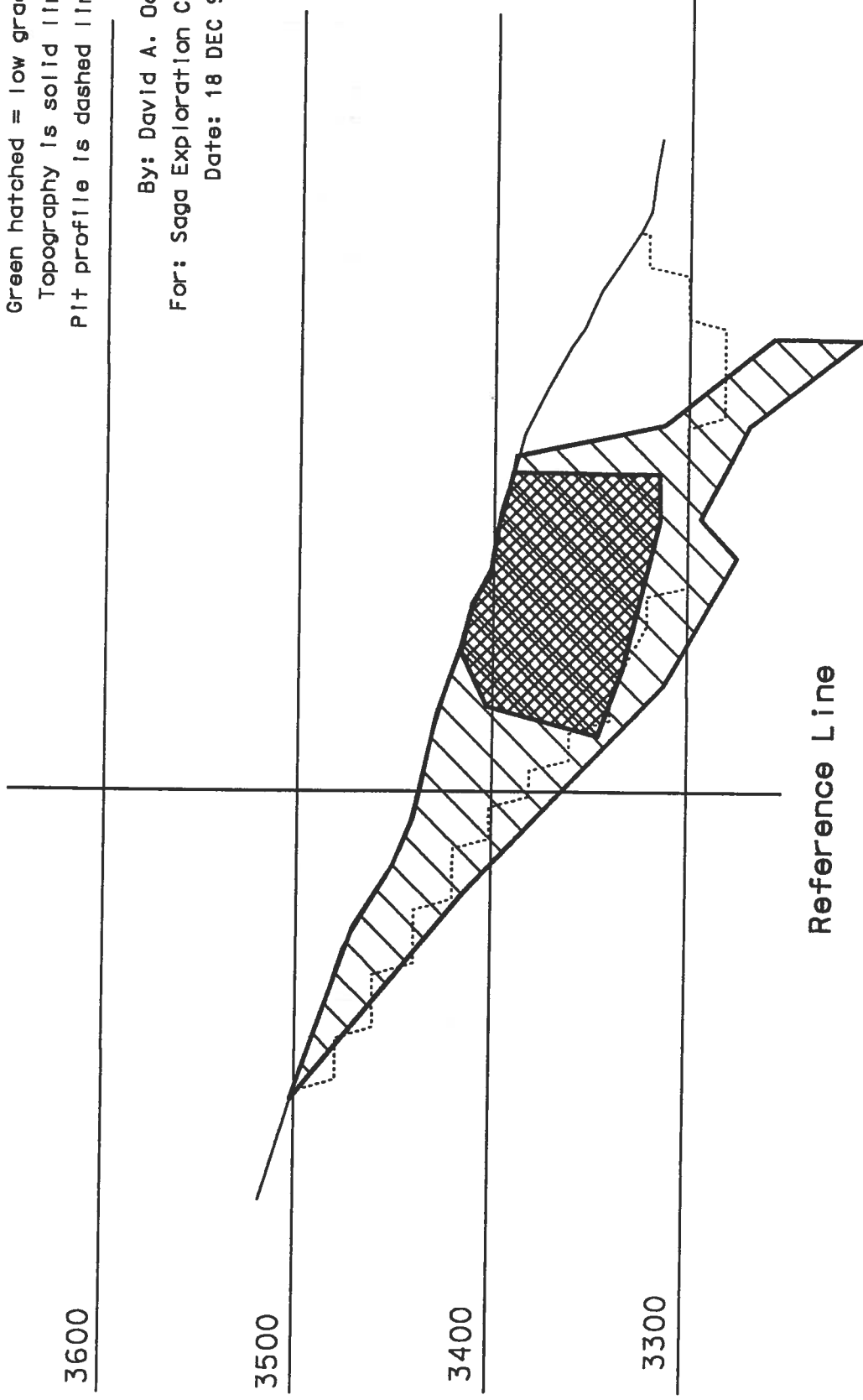


Figure 14. Zenda Project, Kern County, California  
Grade Model  
Cross Section 17

Blue cross-hatched = ore  
Green hatched = low grade  
Topography is solid line  
Pit profile is dashed line

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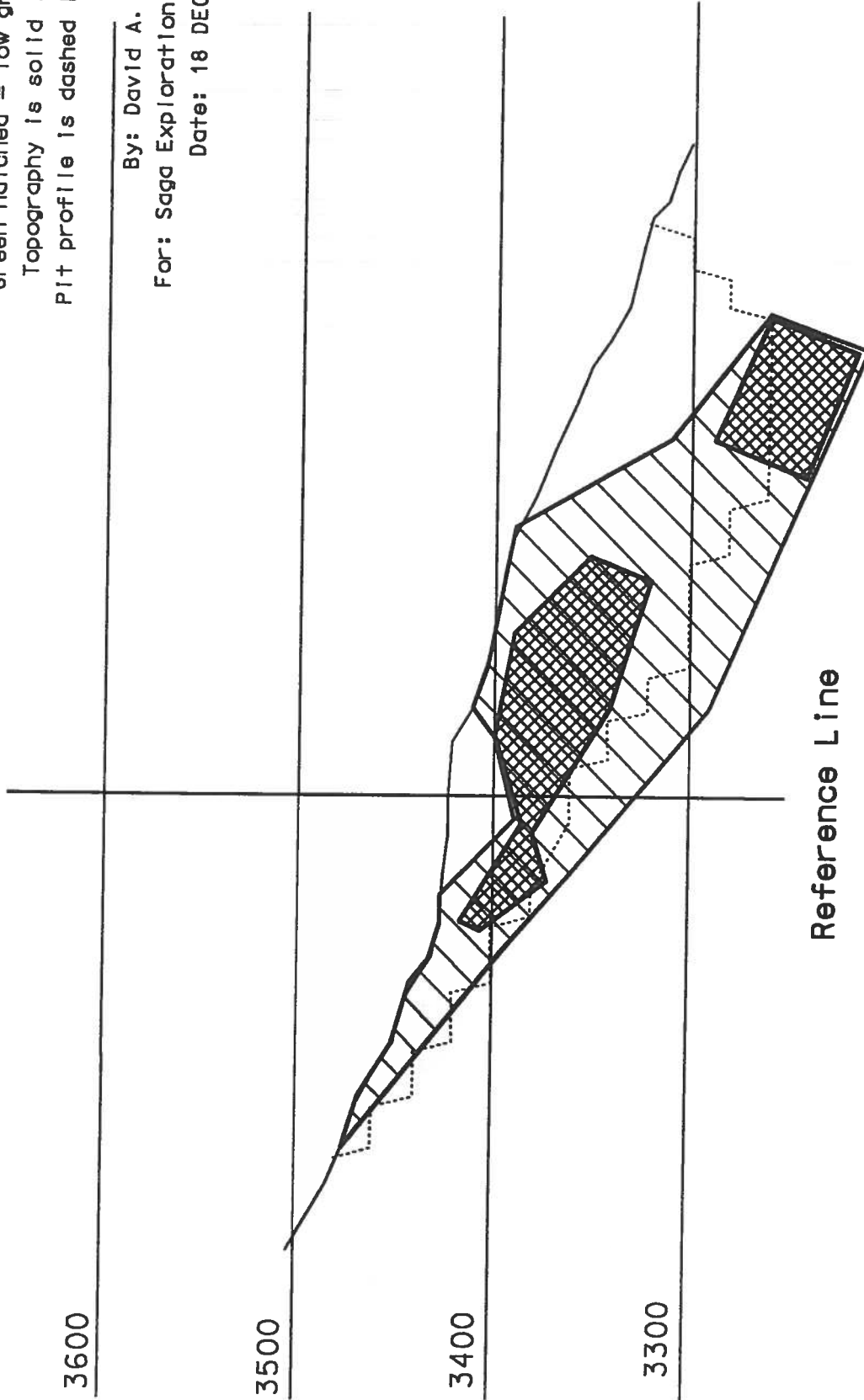


Figure 15. Zenda Project, Kern County, California  
Grade Model  
Cross Section 18

Blue cross-hatched = ore  
Green hatched = low grade  
Topography is solid line  
Pit profile is dashed line

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For: Saga Exploration Co.  
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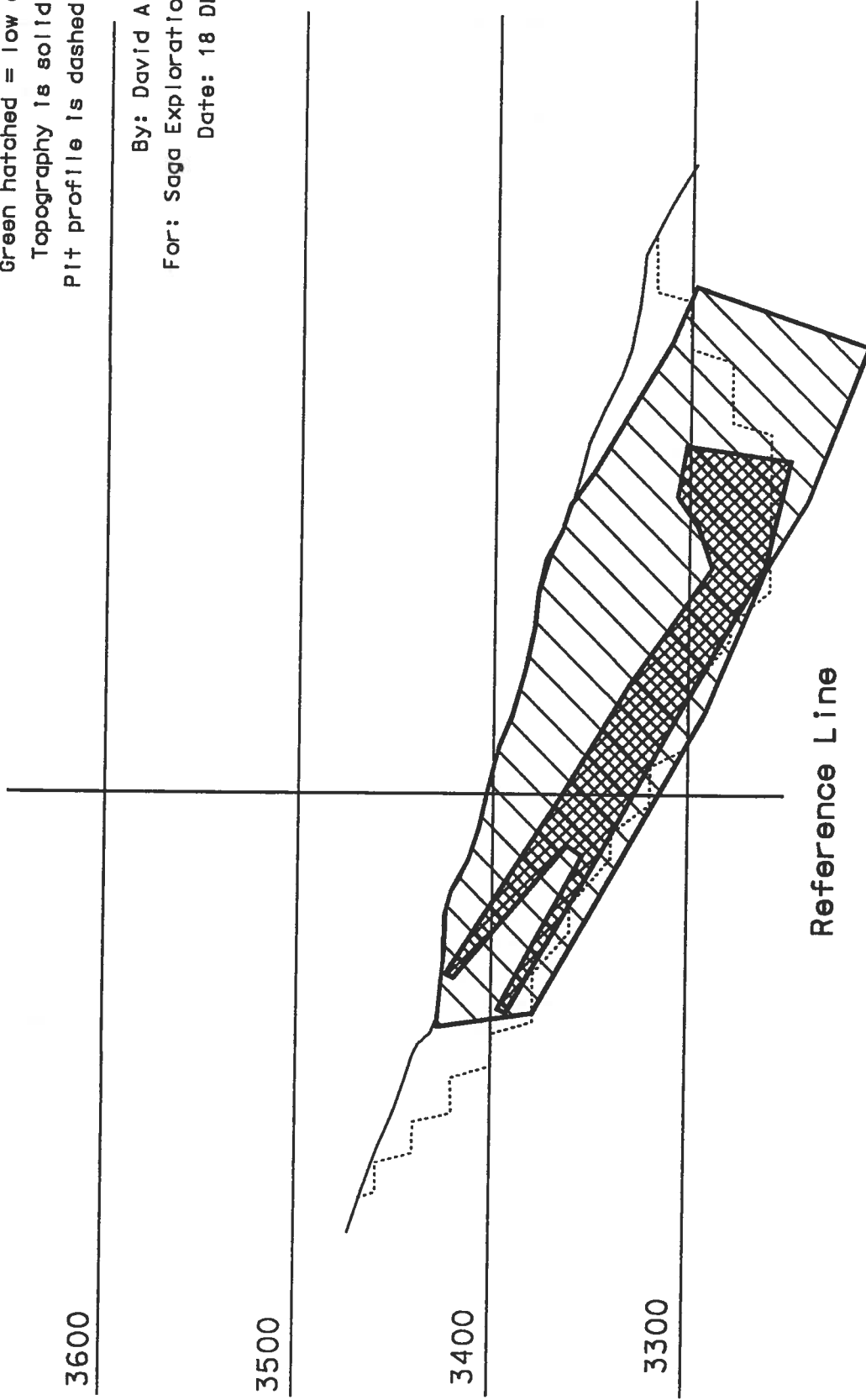


Figure 16. Zenda Project, Kern County, California  
Grade Model  
Cross Section 19

Blue cross-hatched = ore  
Green hatched = low grade  
Topography is solid line  
Pit profile is dashed line

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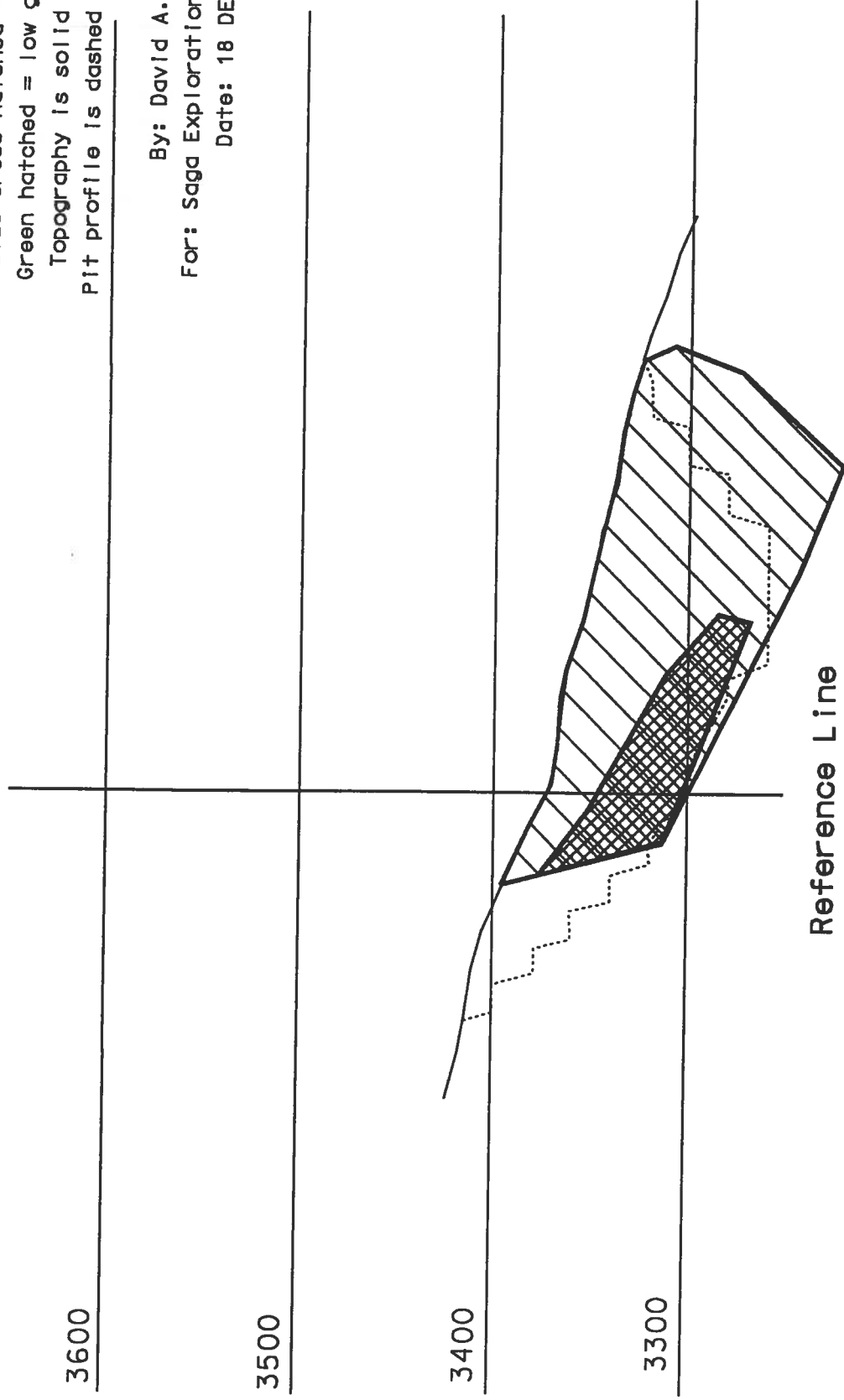


Figure 17. Zenda Project, Kern County, California  
Grade Model  
Cross Section 20

Blue cross-hatched = ore  
Green hatched = low grade  
Topography is solid line  
Pit profile is dashed line

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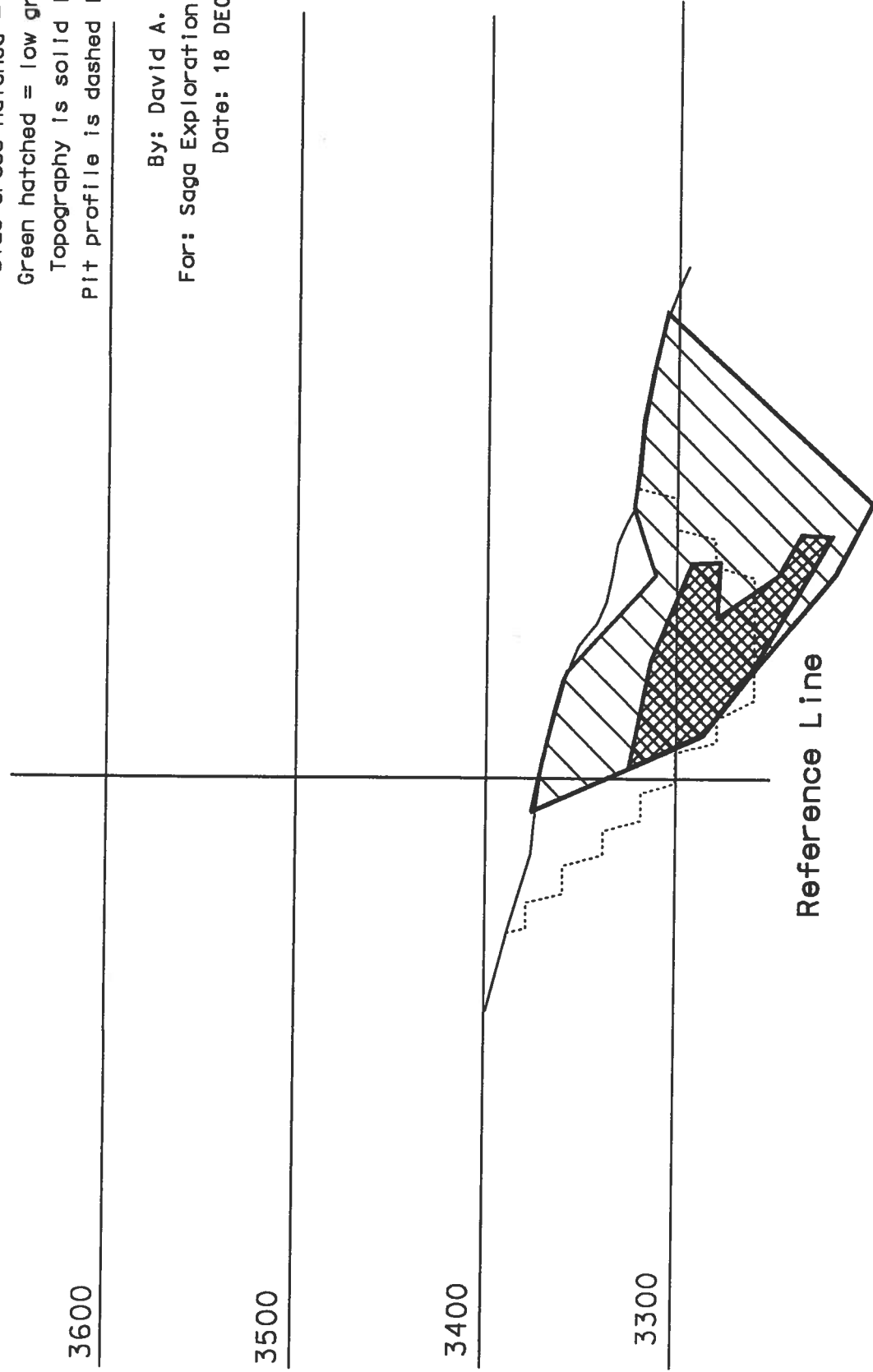
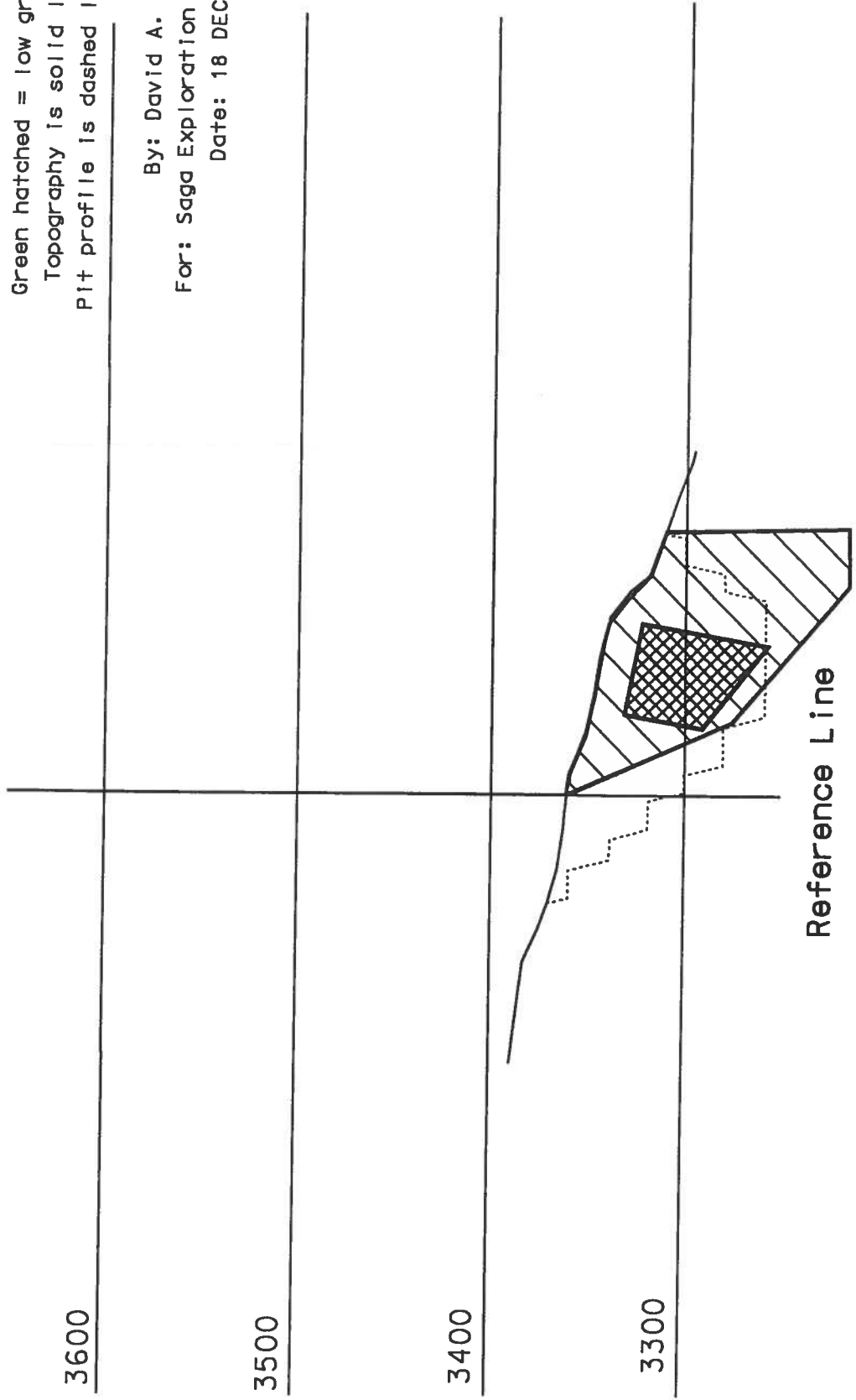


Figure 18. Zenda Project, Kern County, California  
Grade Model  
Cross Section 21

Blue cross-hatched = ore  
Green hatched = low grade  
Topography is solid line  
Pit profile is dashed line

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Reference Line

Figure 19. Zenda Project, Kern County, California  
Isometric view looking southeast  
Ore defined on bench plans is colored blue

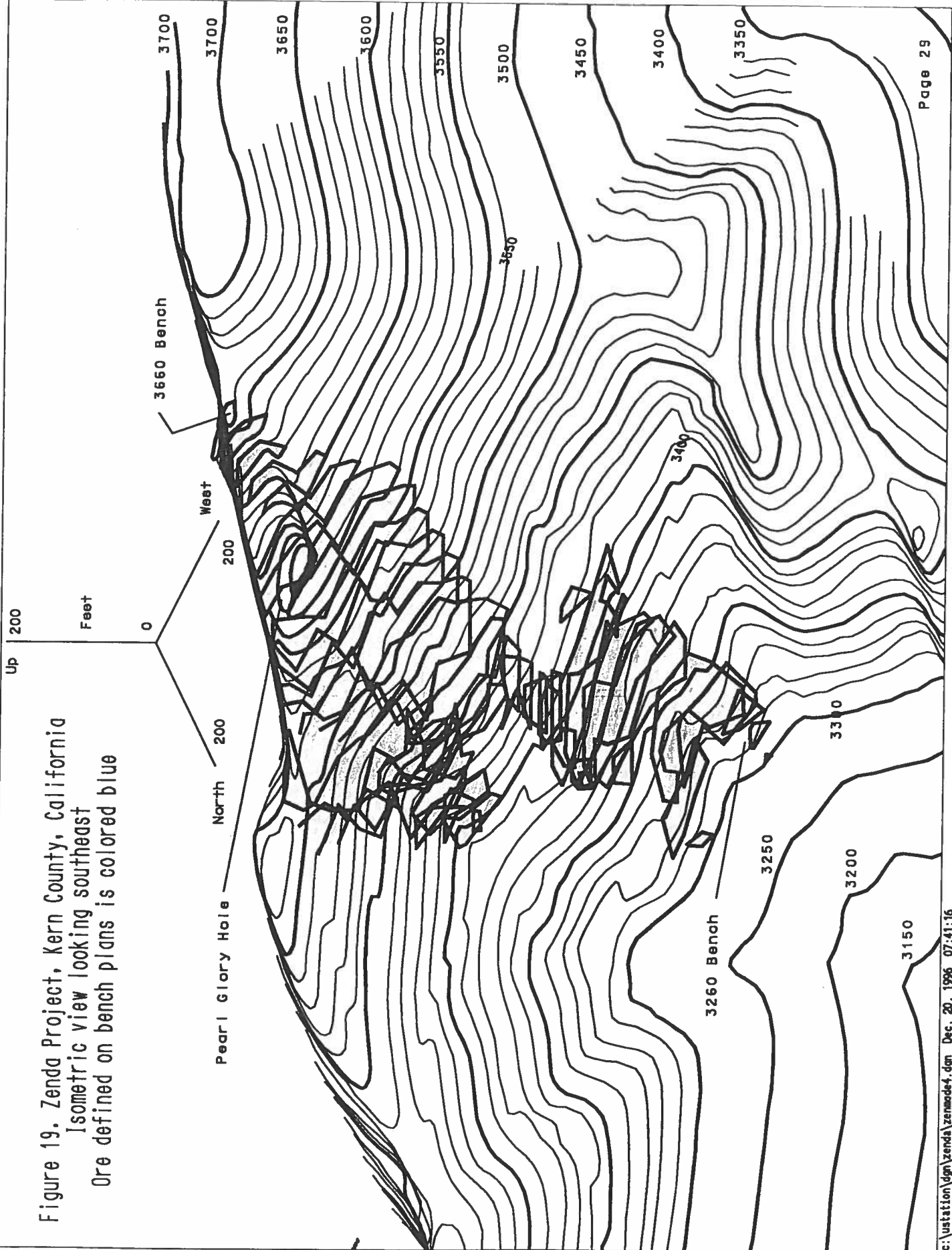


Figure 20

Zenda Project, Kern County, California  
Grade Model  
3660 Bench

Blue cross-hatched = ore  
Green hatched = low grade  
dashed line = bench toe  
solid line = surface topo

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5400N

4800N -  
4200E

4800E

AIR

AIR

Waste

Page 30



Figure 21

Zenda Project, Kern County, California  
Grade Model  
3640 Bench

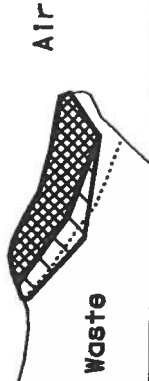
Blue cross-hatched = ore  
Green hatched = low grade  
dashed line = bench toe  
solid line = surface topo

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Date: 18 DEC 96

5400N

4800N  
4200E

4800E



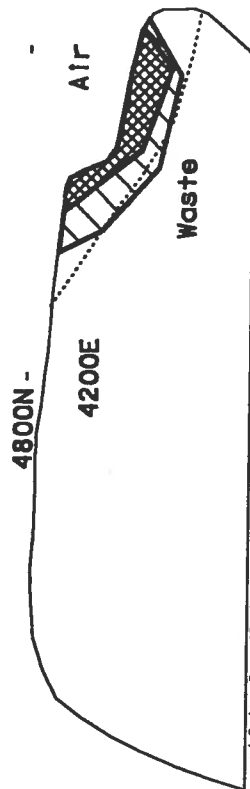
5400N -

Figure 22

Zenda Project, Kern County, California  
Grade Model  
3620 Bench

Blue cross-hatched = ore  
Green hatched = low grade  
dashed line = bench toe  
solid line = surface topo

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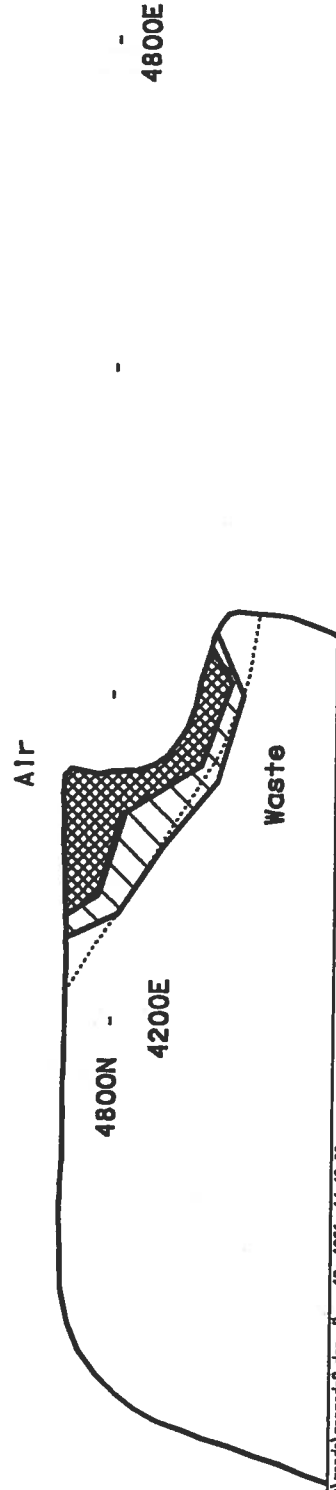
5400N

Figure 23

Zenda Project, Kern County, California  
Grade Model  
3600 Bench

Blue cross-hatched = ore  
Green hatched = low grade  
dashed line = bench toe  
solid line = surface topog

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5400N

Figure 24

Zenda Project, Kern County, California  
Grade Model  
3580 Bench

Blue cross-hatched = ore  
Green hatched = low grade  
dashed line = bench toe  
solid line = surface topo

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Figure 25

Zenda Project, Kern County, California  
Grade Model  
3560 Bench

Blue cross-hatched = ore  
Green hatched = low grade  
dashed line = bench toe  
solid line = surface topo

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5400N

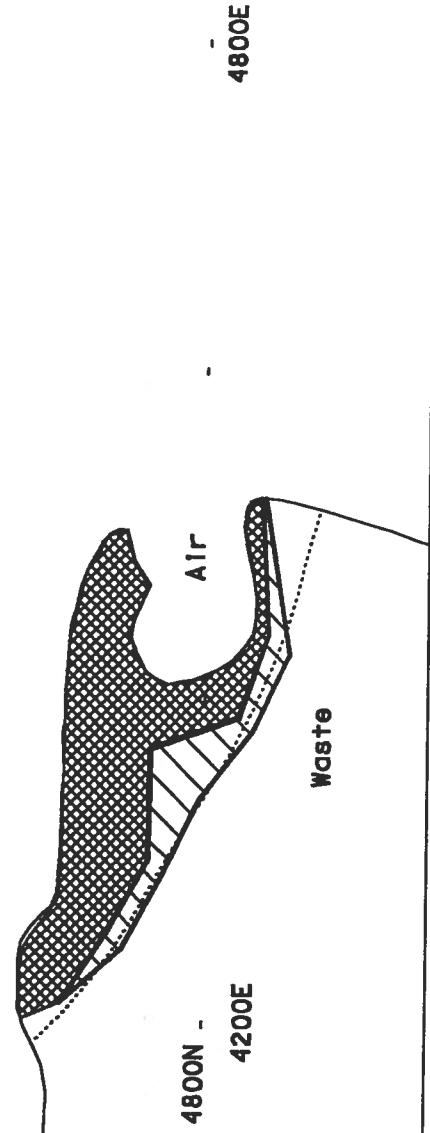


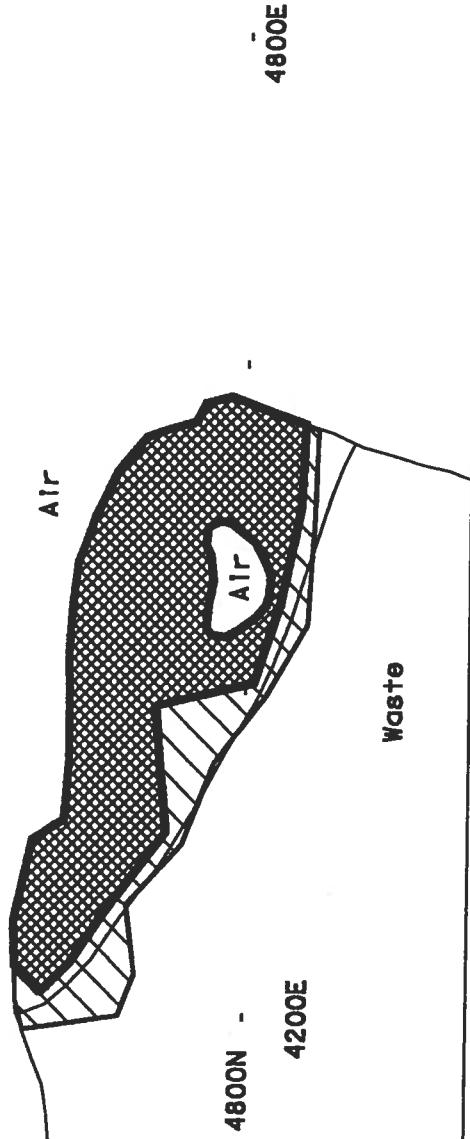
Figure 26

Zenda Project, Kern County, California  
Grade Model  
3540 Bench

Blue cross-hatched = ore  
Green hatched = low grade  
dashed line = bench toe  
solid line = surface topo

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5400N



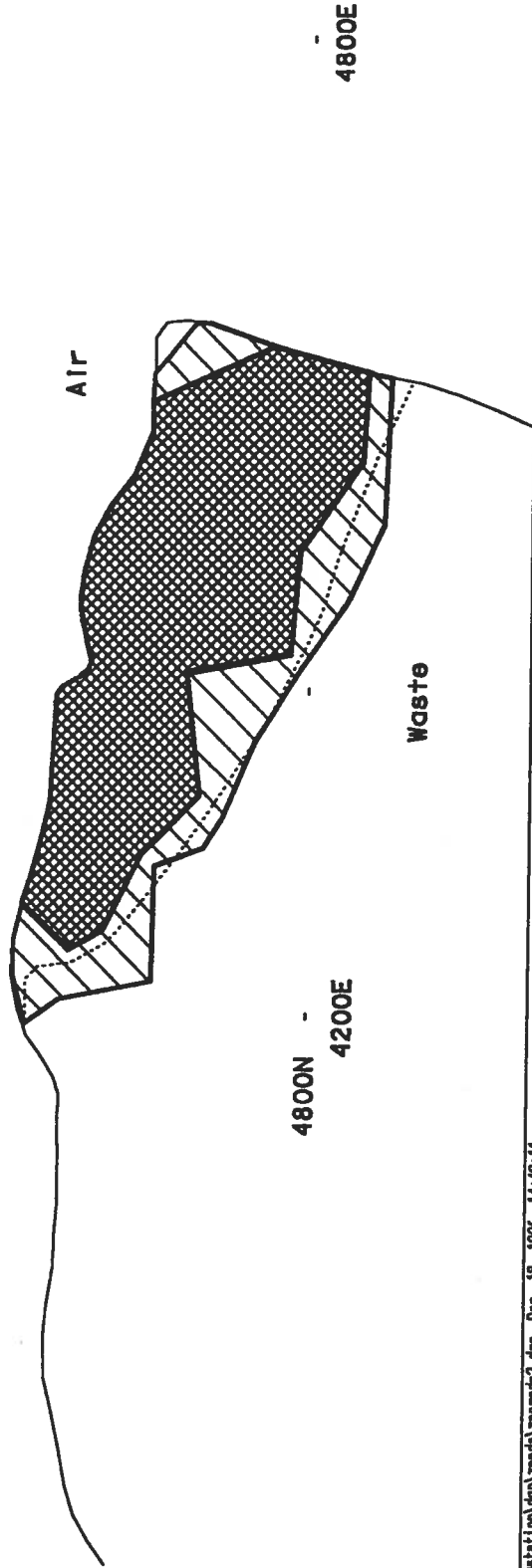
5400N

Figure 27

Zenda Project, Kern County, California  
Grade Model  
3520 Bench

Blue cross-hatched = ore  
Green hatched = low grade  
dashed line = bench toe  
solid line = surface topo

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5400N

Figure 28

Zenda Project, Kern County, California  
Grade Model  
3500 Bench

Blue cross-hatched = ore  
Green hatched = low grade  
dashed line = bench toe  
solid line = surface topo

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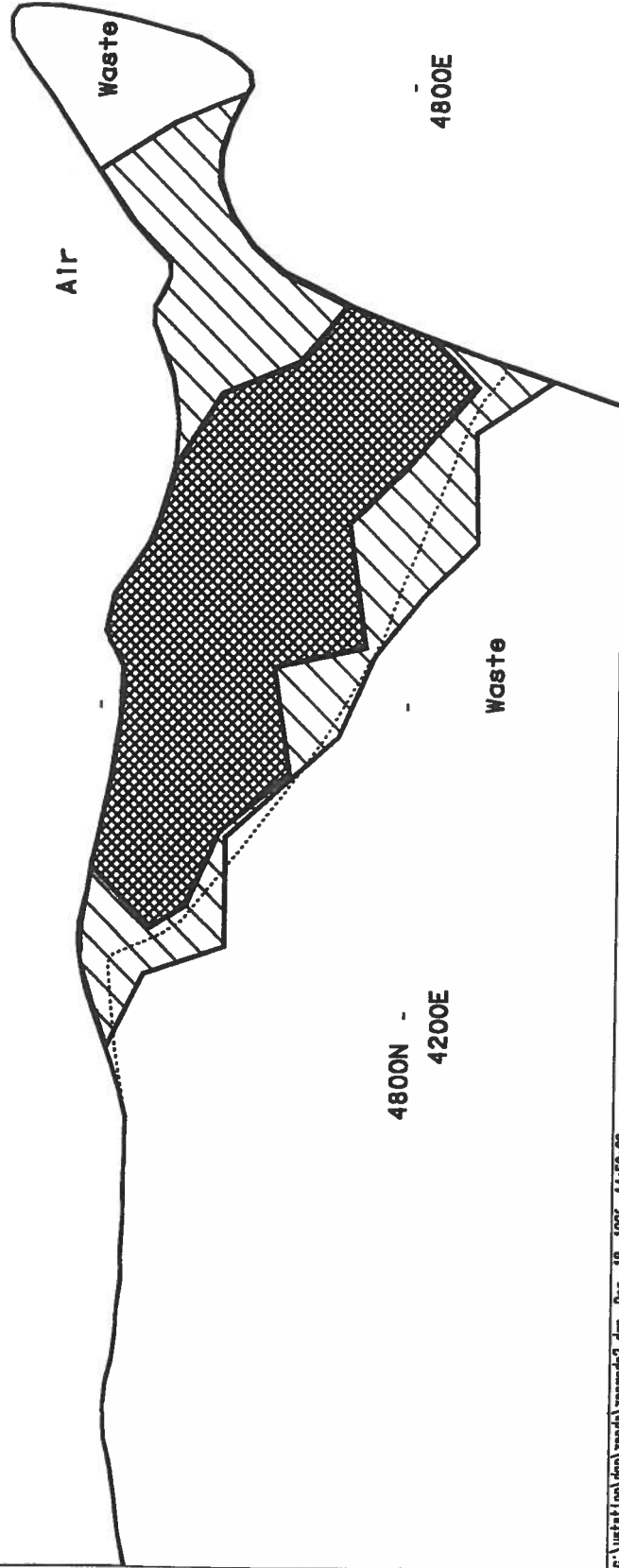


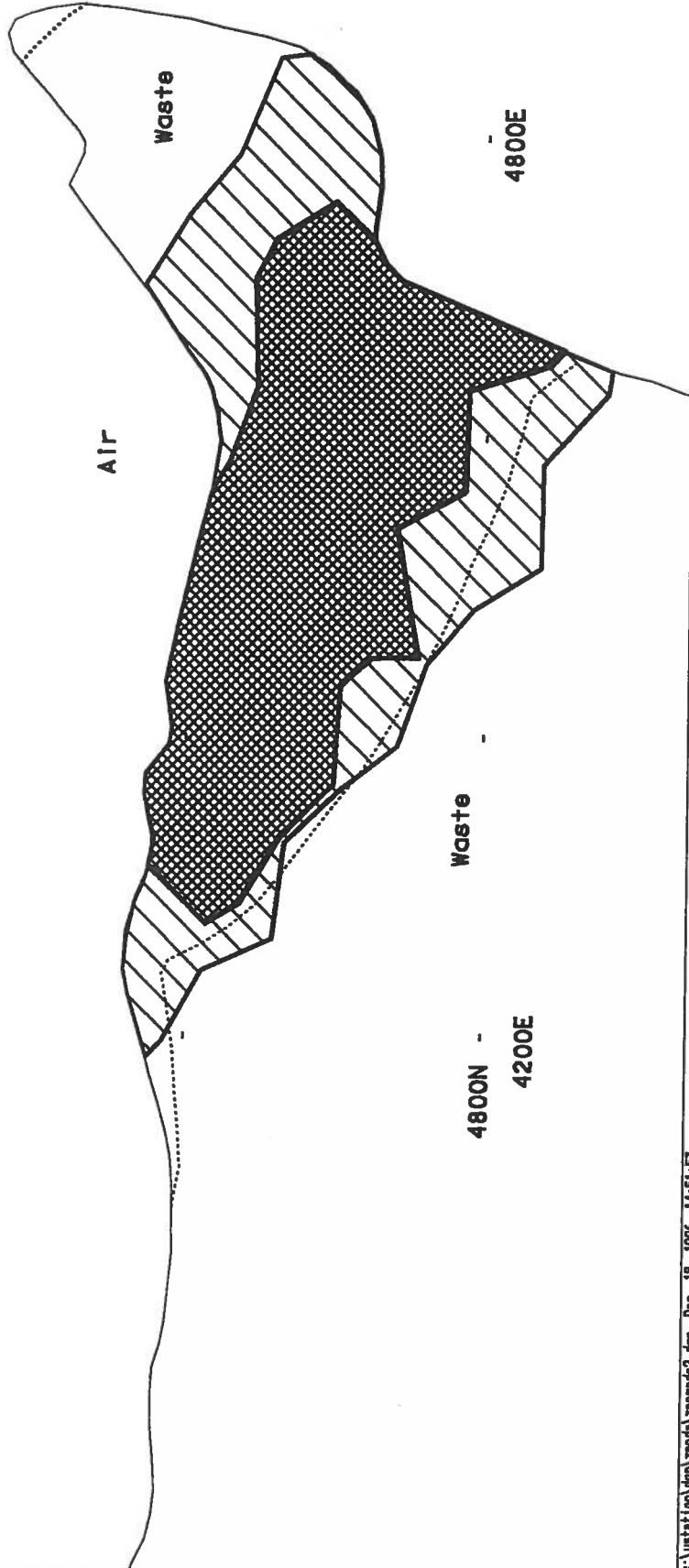


Figure 29

Zenda Project, Kern County, California  
Grade Model  
3480 Bench

Blue cross-hatched = ore  
Green hatched = low grade  
dashed line = bench toe  
solid line = surface topo

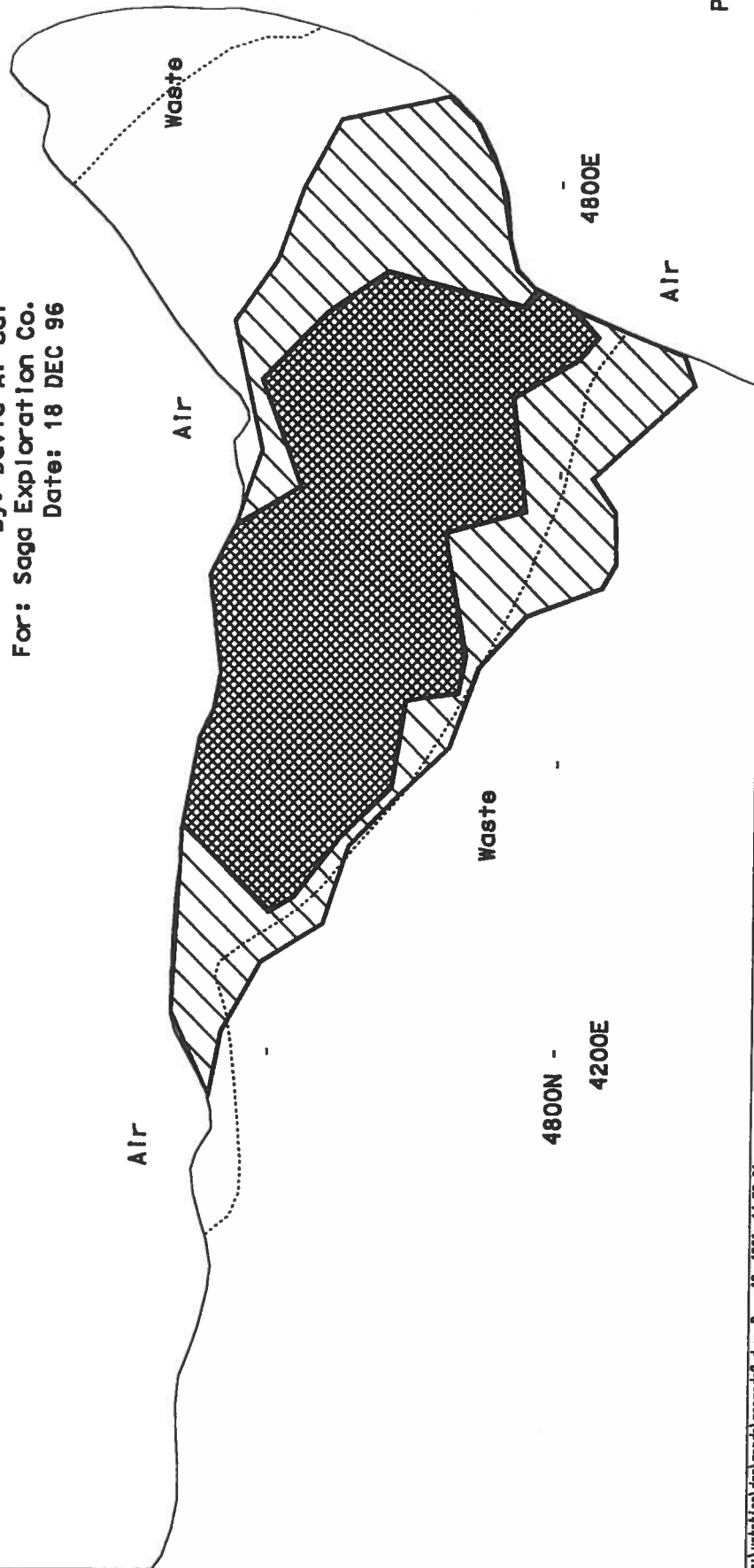
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5400N  
Figure 30  
Zenda Project, Kern County, California  
Grade Model  
3460 Bench

Blue cross-hatched = ore  
Green hatched = low grade  
dashed line = bench toe  
solid line = surface topo

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**Figure 31**  
**5400N**  
**Zenda Project, Kern County, California**  
**Grade Model**  
**3440 Bench**

Blue cross-hatched = ore  
 Green hatched = low grade  
 dashed line = bench toe  
 solid line = surface topo

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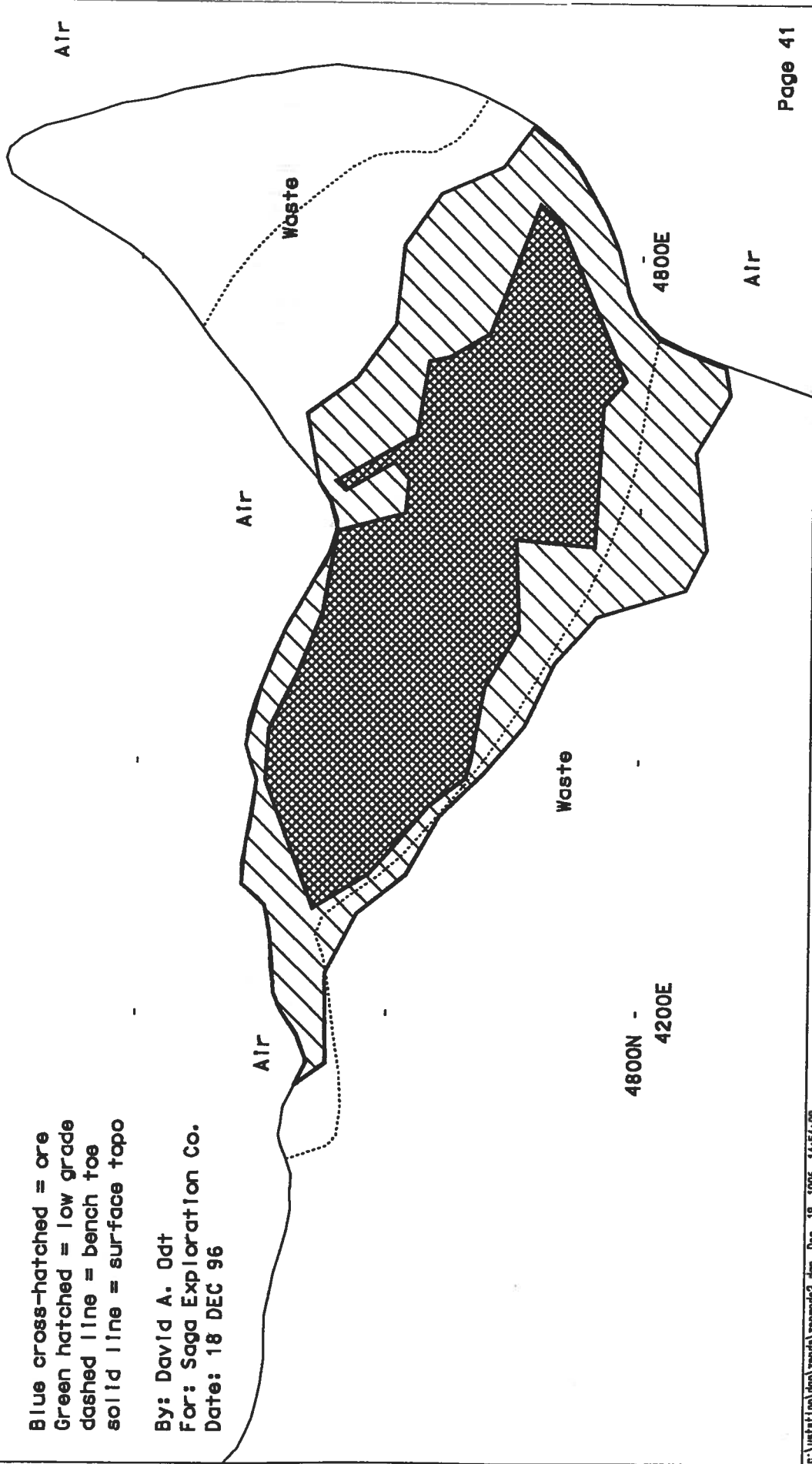


Figure 33

Zenda Project, Kern County, California  
Grade Model  
3400 Bench

Blue cross-hatched = ore  
Green hatched = low grade  
Dashed line = bench toe  
Solid line = surface topo

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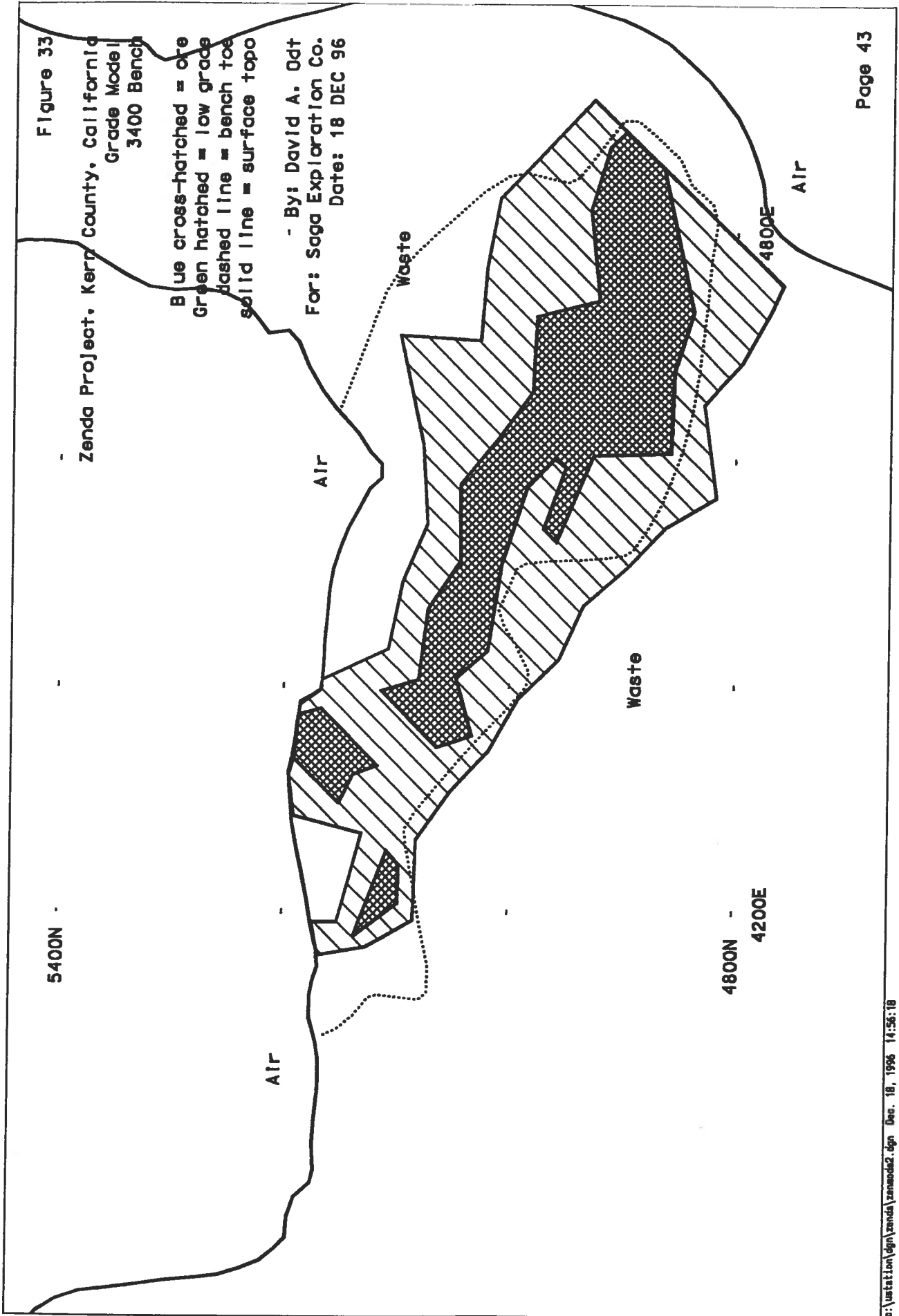


Figure 34

Zenda Project, Kern County, California  
Grade Model  
3380 Bench

Blue cross-hatched = ore  
Green hatched = low grade  
dashed line = bench top  
solid line = surface topo

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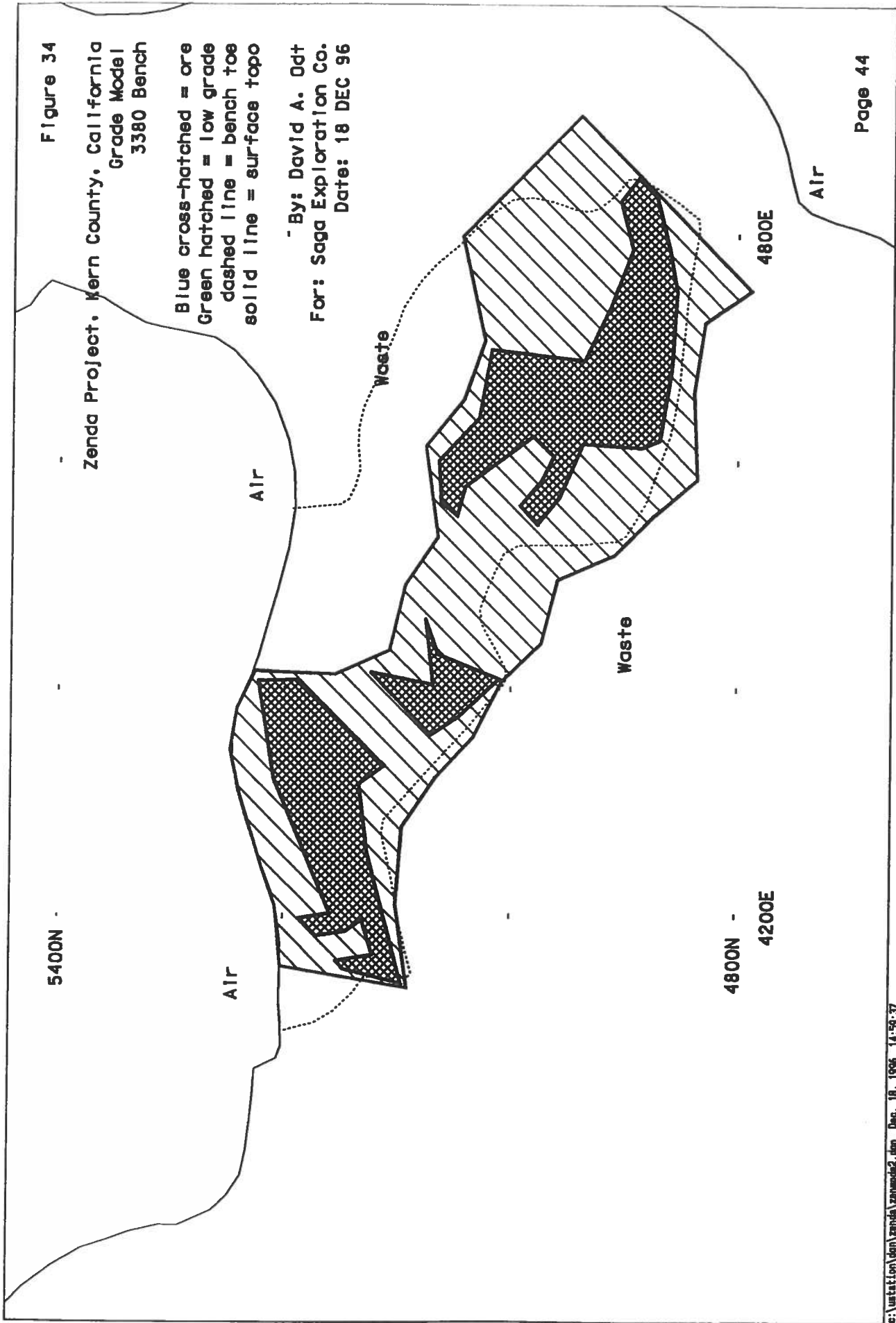


Figure 35

Zenda Project, Kern County, California  
Grade Model  
3360 Bench

Blue cross-hatched = ore  
Green hatched = low grade  
dashed line = bench toe  
solid line = surface topo

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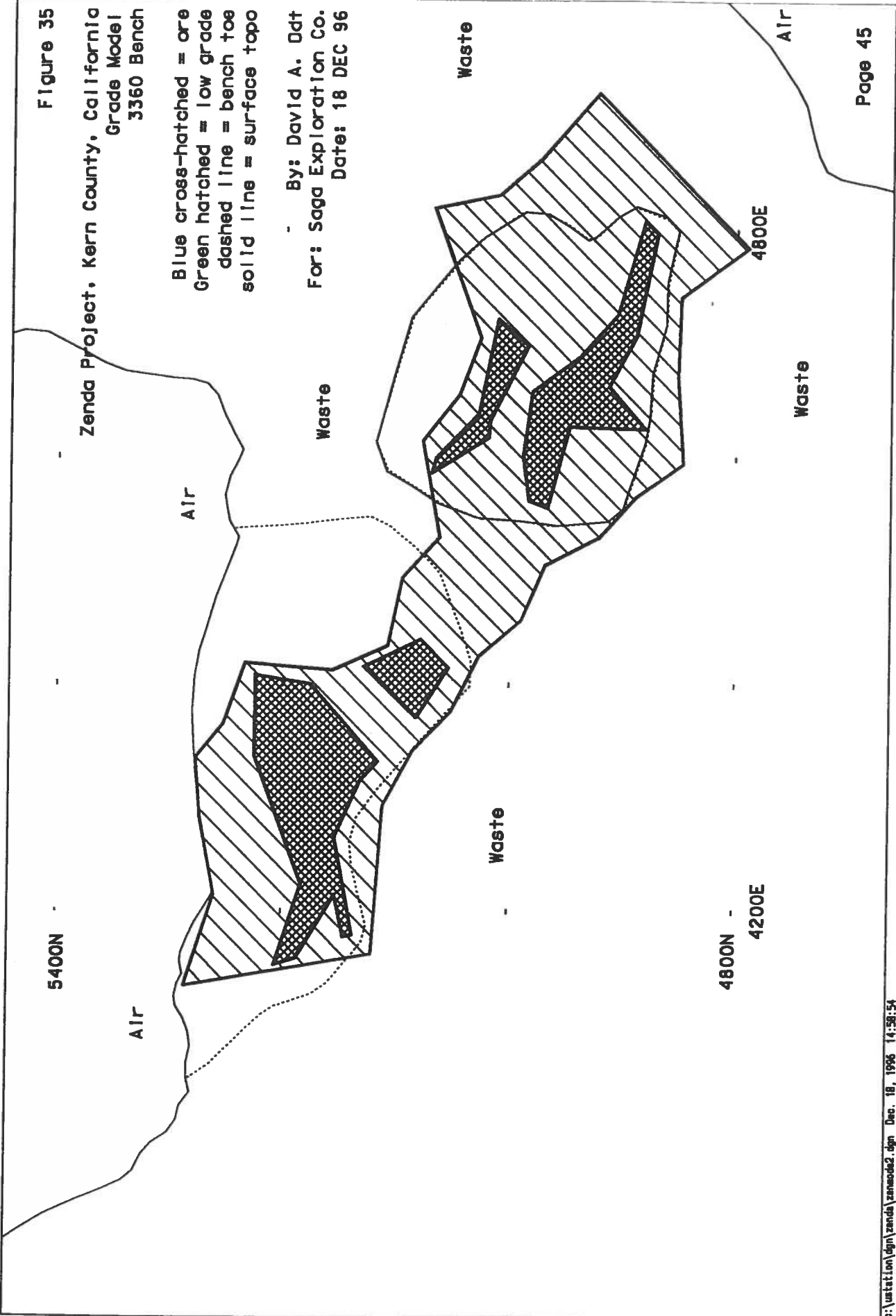


Figure 36

Zenda Project, Kern County, California  
Grade Model  
3340 Bench

Blue cross-hatched = ore  
Green hatched = low grade  
dashed line = bench toe  
solid line = surface topo

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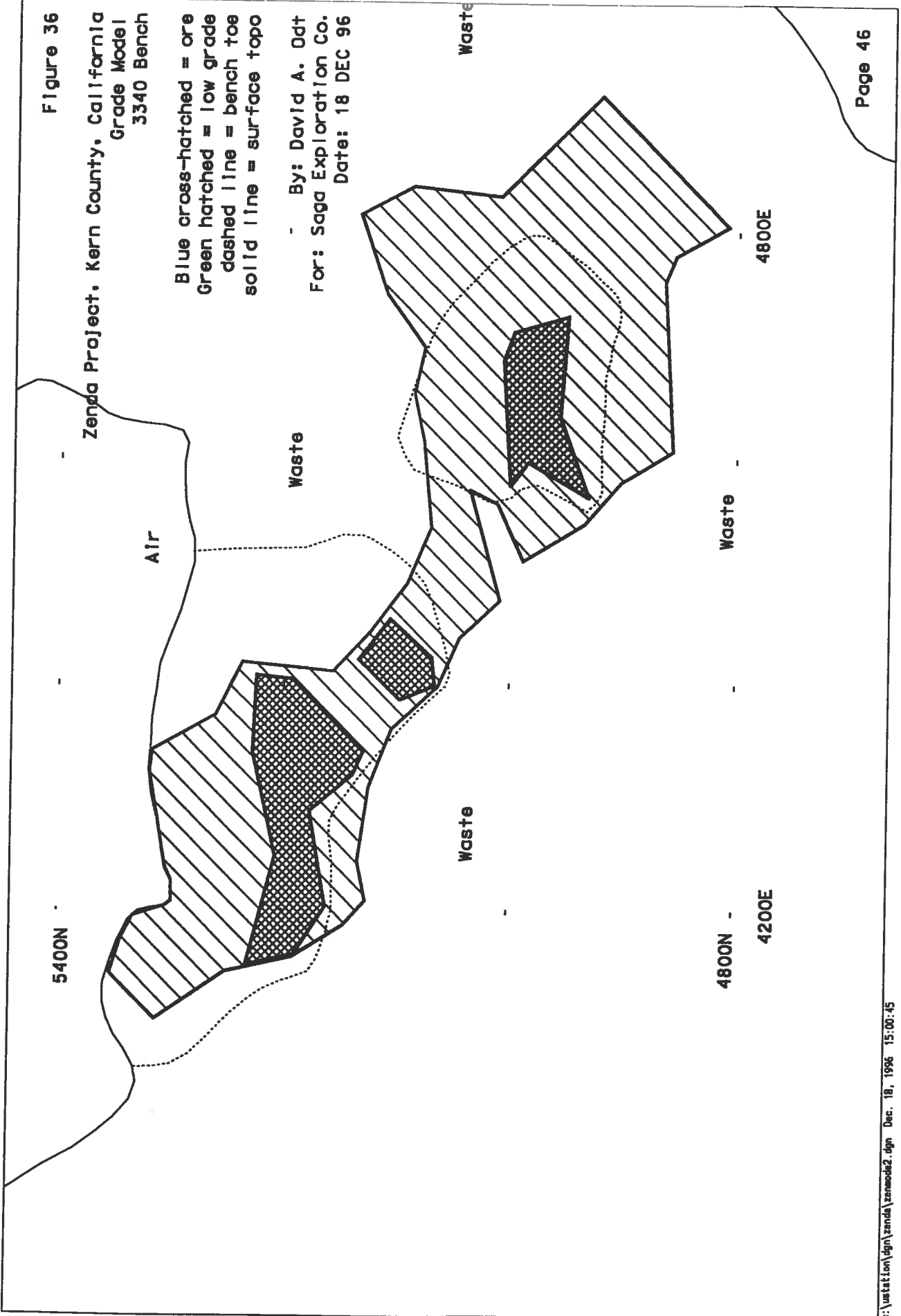


Figure 37

Zenda Project, Kern County, California  
Grade Model  
3320 Bench

Blue cross-hatched = ore  
Green hatched = low grade  
dashed line = bench toe  
solid line = surface topo

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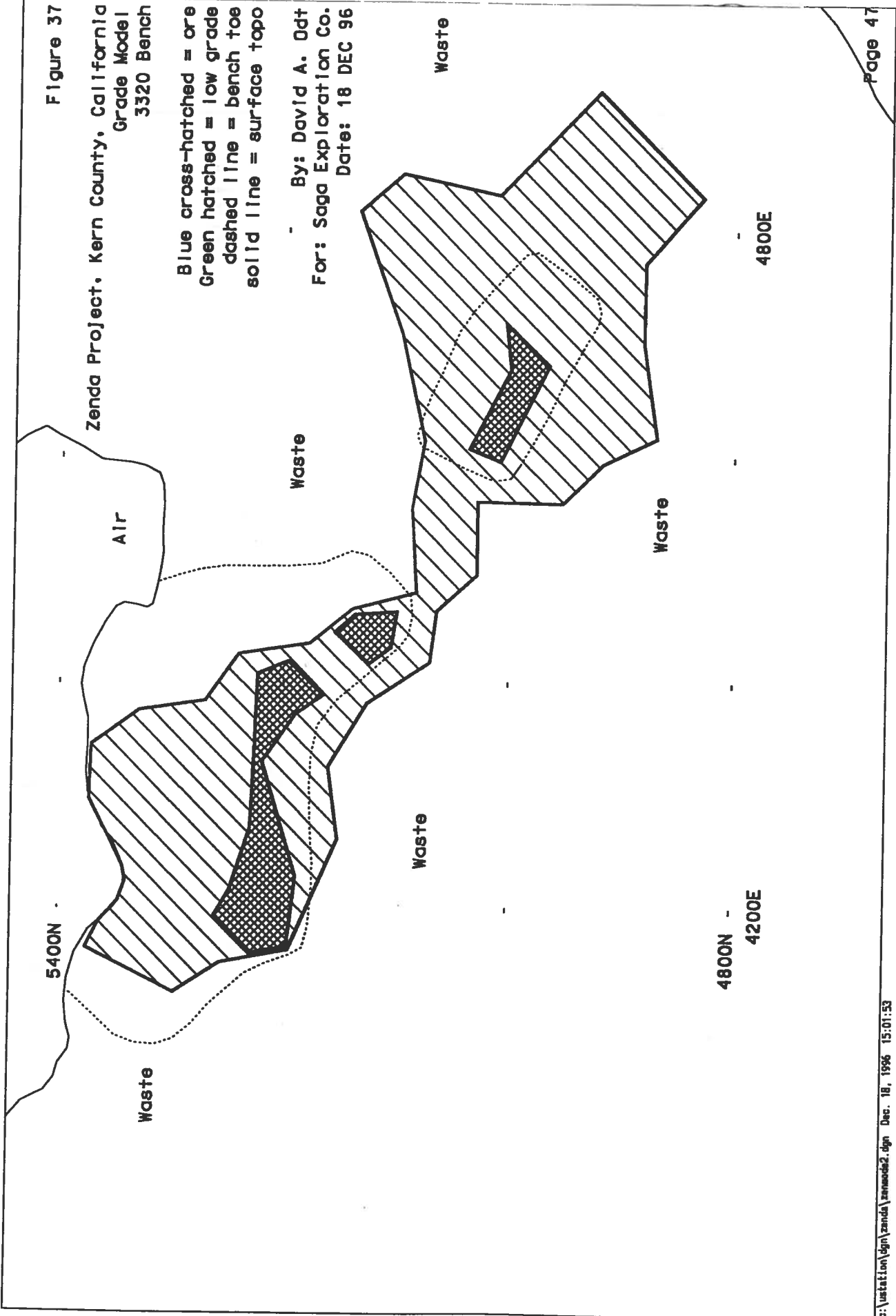




Figure 38

Zenda Project, Kern County, California  
Grade Model  
3300 Bench

Blue cross-hatched = ore  
Green hatched = low grade  
dashed line = bench toe  
solid line = surface topo

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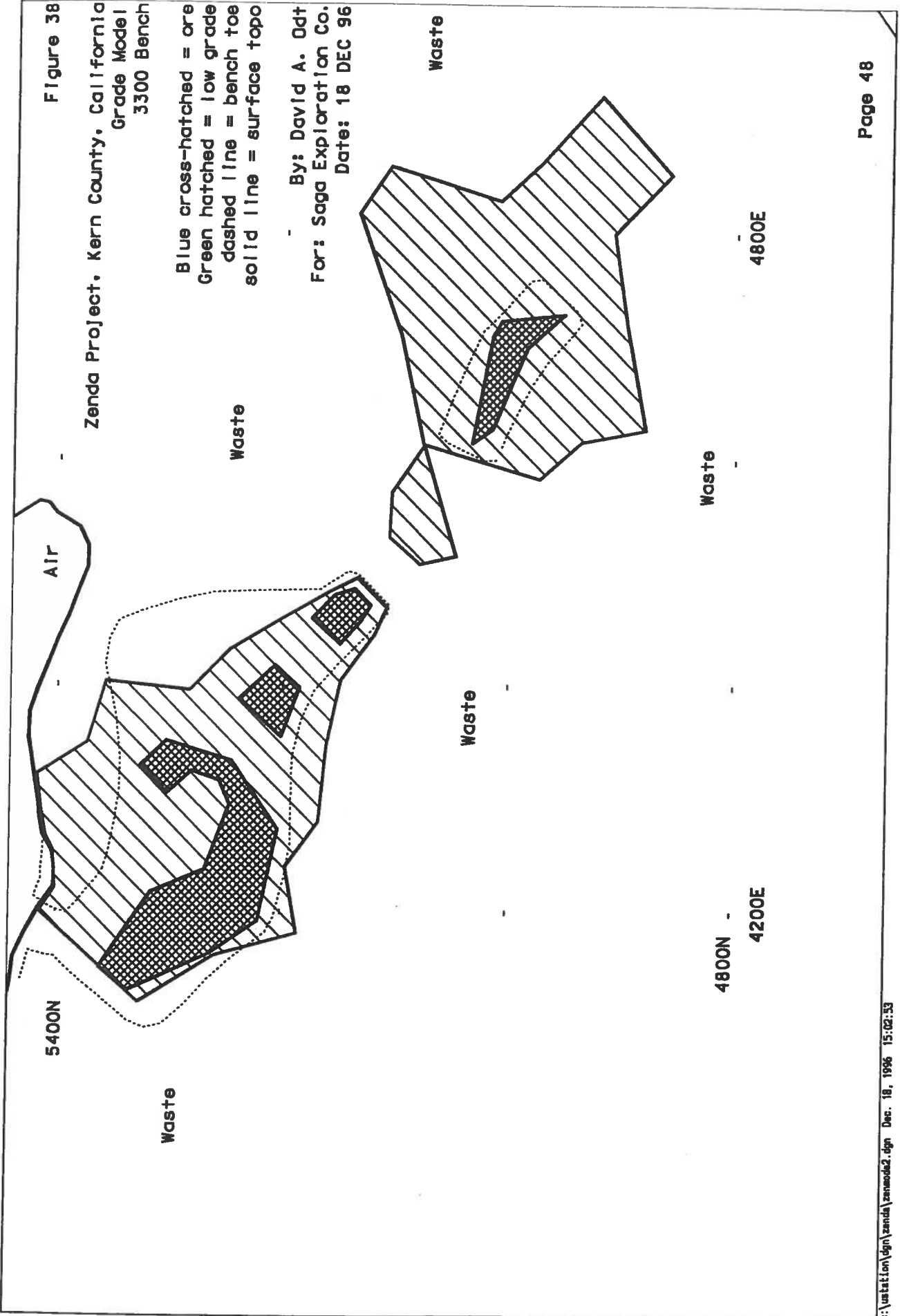


Figure 39

Zenda Project, Kern County, California  
Grade Model  
3280 Bench

Blue cross-hatched = ore  
Green hatched = low grade  
dashed line = bench toe  
solid line = surface topo

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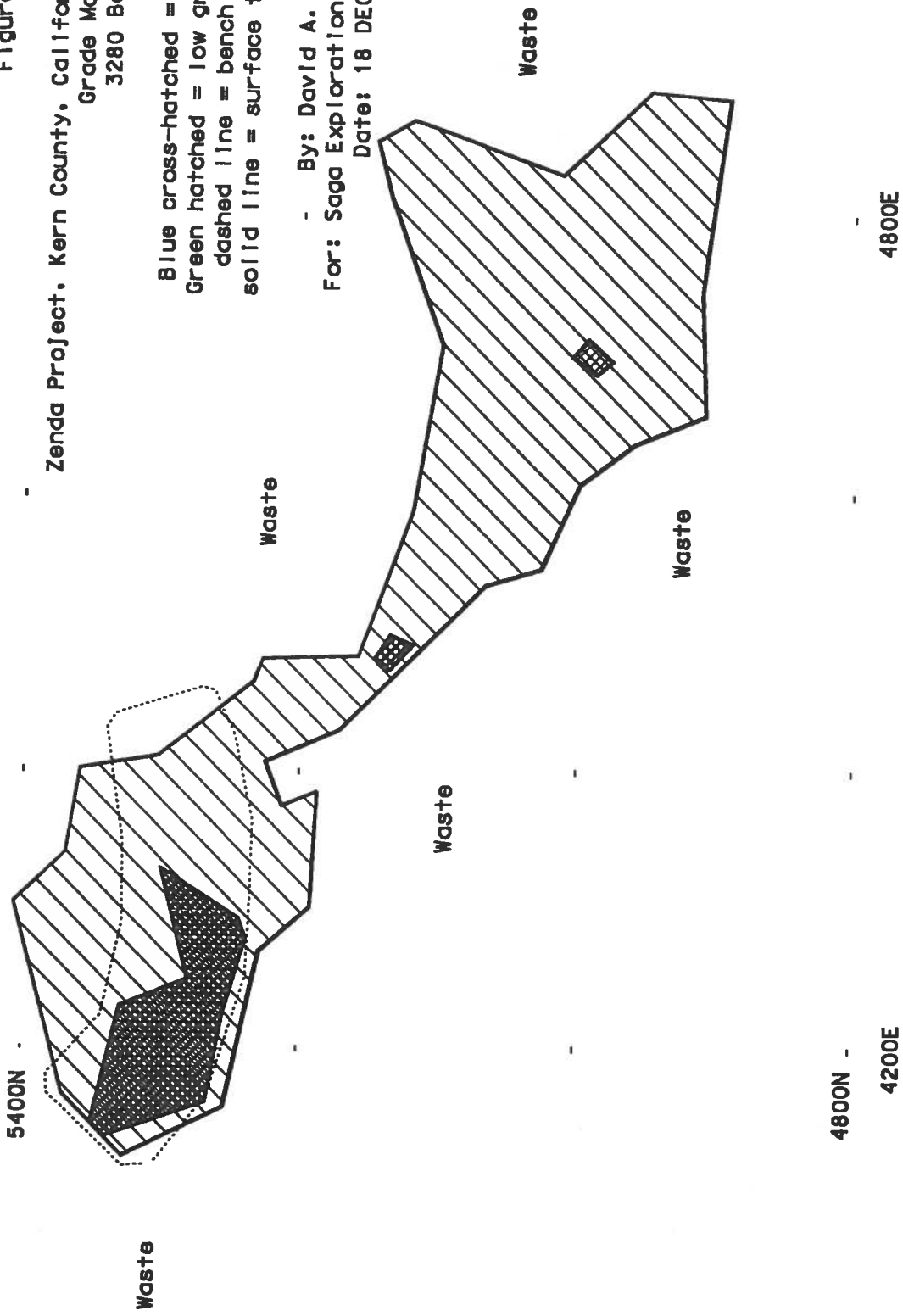


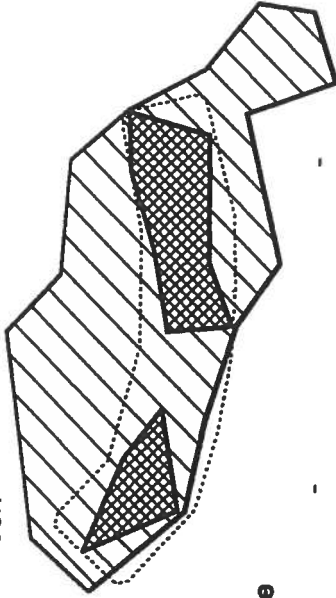
Figure 40

Zenda Project, Kern County, California  
Grade Model  
3260 Bench

Blue cross-hatched = ore  
Green hatched = low grade  
dashed line = bench toe  
solid line = surface topo

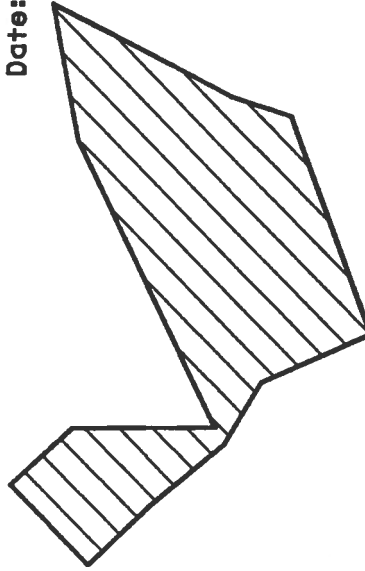
By: David A. Odt  
For: Saga Exploration Co.  
Date: 18 DEC 96

5400N



Waste

Waste



Waste

Waste

4800N

4200E

4800E

c:\ustation\ dgn\zenda\pit3\plan.dgn Dec. 18, 1996 15:14:29

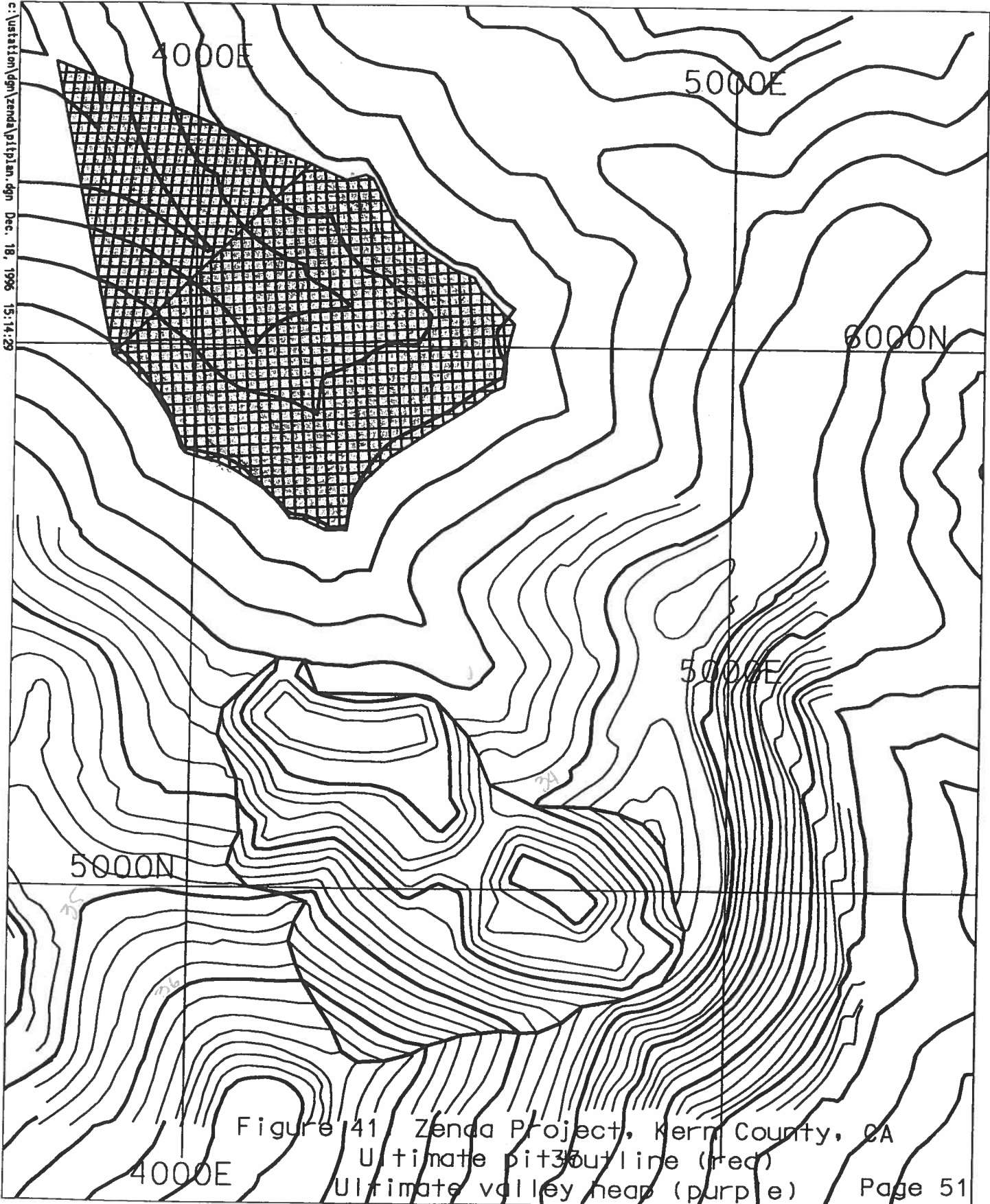


Figure 41 Zenda Project, Kern County, CA  
Ultimate pit3 outline (red)  
Ultimate valley heap (purple)