BLAST REPORT **BLAST REPORT #** WS 41

☐ Sanders Construction, Inc. ☐ Western States Drilling & Blasting, Inc.

DATE: SEPT 22, 2010 EXACT TIME OF SHOT: 6:40

CUSTOMER: KLB JOB NO.: WS21005

SHOT LOCATION WITH GPS COORDINATES: PRESPLIT 1337-1338+50 TICKET NO.:

PROD. 1337+25 - 1338+75 CHECK LIST COMPLETED: YES NO

TYPE OF ROCK: LAPILLI TUFF FACE HEIGHT: 24 FT. POUNDS PER DELAY:

TOTAL HOLES: 61 HOLES PRESPLIT 3"x 27' 3"Φ @ 30" c/c .25/1 SLOPE 1647 LF

NUMBER OF HOLES: 17 HOLE DIA: 3½ BxS 8 x 8 STEMMING: 7 DEPTH: 12

NUMBER OF HOLES: 165 HOLE DIA: 3½ BxS 8 x 8 STEMMING: 7 DEPTH: 25

POWDER FACTOR: .6 LBS. OF EXPLOSIVES: 6270 YARDS OF ROCK: 10,438

WEATHER: LIGHT DRIZZLE COOL WIND: CALM

EXACT MONITOR LOCATION(GPS): DIRECTION OF BLAST: MONITOR TYPE:

MONITOR: L/R T V PVS Db MONITOR SERIAL NO.:

DISTANCE TO BLAST: AVERAGE POUNDS PER HOLE: OPERATOR:

EXACT MONITOR LOCATION(GPS): DIRECTION OF BLAST: MONITOR TYPE:

MONITOR: L/R T V PVS Db MONITOR SERIAL NO.:

DISTANCE TO BLAST: AVERAGE POUNDS PER HOLE: OPERATOR:

EXPLOSIVES

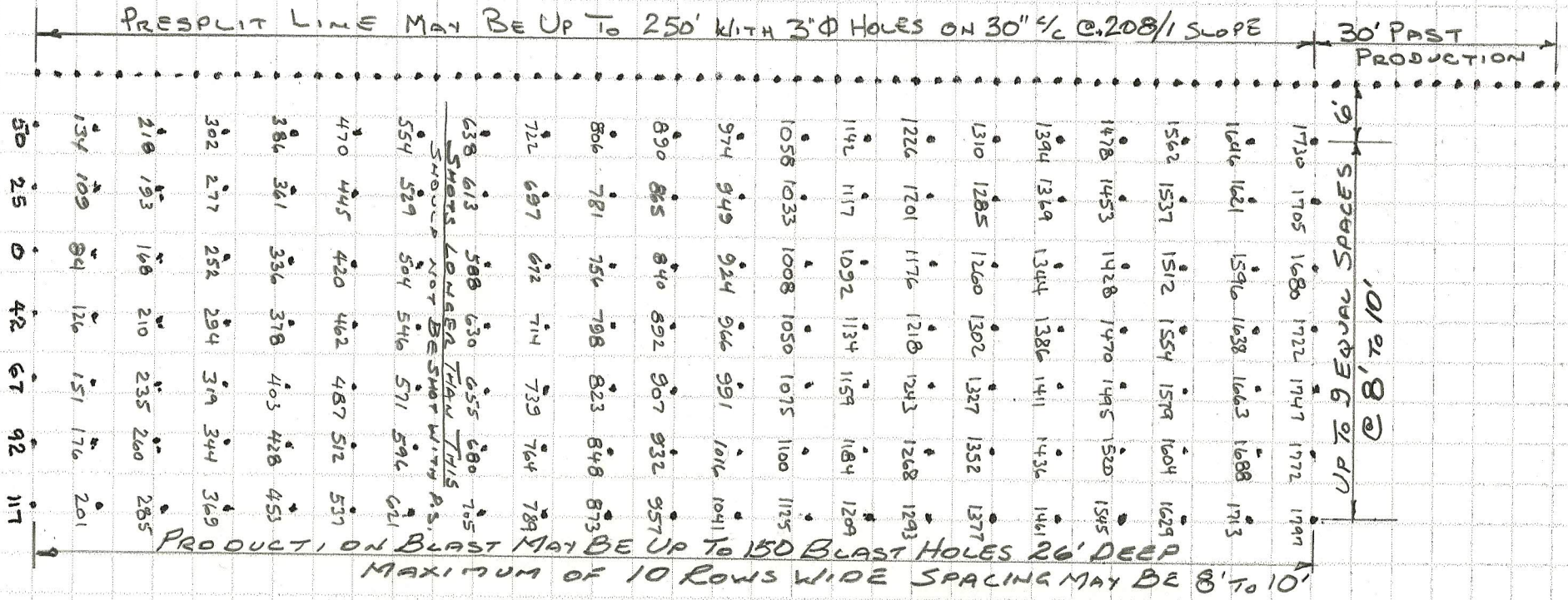
DESCRIPTION	QUANTITY USED	DATE CODE	MAGAZINE	REMOVED	RETURNED
LOCATION:					
~~BULKED~~ PRESPLIT 7/8	4.5 Cs ~~lbs~~	13AP10 x2		4.5	0
~~BAGGED~~ PRESPLIT 7/8	3.5 Cs Bags	15AP10 x2		5.5	2
~~POWDER~~ M. FRAC	7 Cs ea.	08 02 12		9	2
POWDER 2.5 x 16	20 Cs ea.	28JY10J1		20	0
FORTEL 2.5 x 16 lb BOOSTER	4 Cs ea.	30JU10J1		4	0
AMEX BAG lb BOOSTER	68 ea.	08SEP10		135	67
MSC ft. ~~MS17~~	9 ea.	12JA09B4		36	27
16 ft. H DET	0 ea.	19OC09B4		36	36
12 ft. CTD 42	33 ea.	25JA10B4		48	15
30 ft. H. DET	94 ea.	~~08DE B4~~ & 16AU10B4		94	0
40 ft. H. DET	2 ea.	08DE08B4		2	0
40 ft. H DET	30 ea.	08FE10B4		30	0
40 ms ft. H DET	56 ea.	05JY10B4		135	79
2x16 DET GEL	14 Cs #	21MY10x2		14	0
50 GRAIN CORD	½ RL ft.	31MY10B4		2 RL	1.5 RL
18 GRAIN CORD	½ RL ft.	22FE10B4		4 RL	3.5 RL
MISCELLANEOUS					~~86~~
PENTEX 3/4#	40 cs	01MA10B4		126	86
FORTEL 2½ x 16	8 CS	02JU10J1		~~3~~ 40	8

COMMENTS: NUMEROUS HOLES WERE EITHER PARTIALLY OR COMPLETELY BLOCKED RESULTING IN THE LOW POWDER FACTOR AND THE NECESSITY TO USE PACKAGED EXPLOSIVE DUE TO WATER

BLASTER'S SIGNATURE: [signature] LICENSE NO.: UP21262

ATTACH SKETCH OF SHOT

Revised 03/04 THIS FORM MUST BE FILLED OUT COMPLETELY



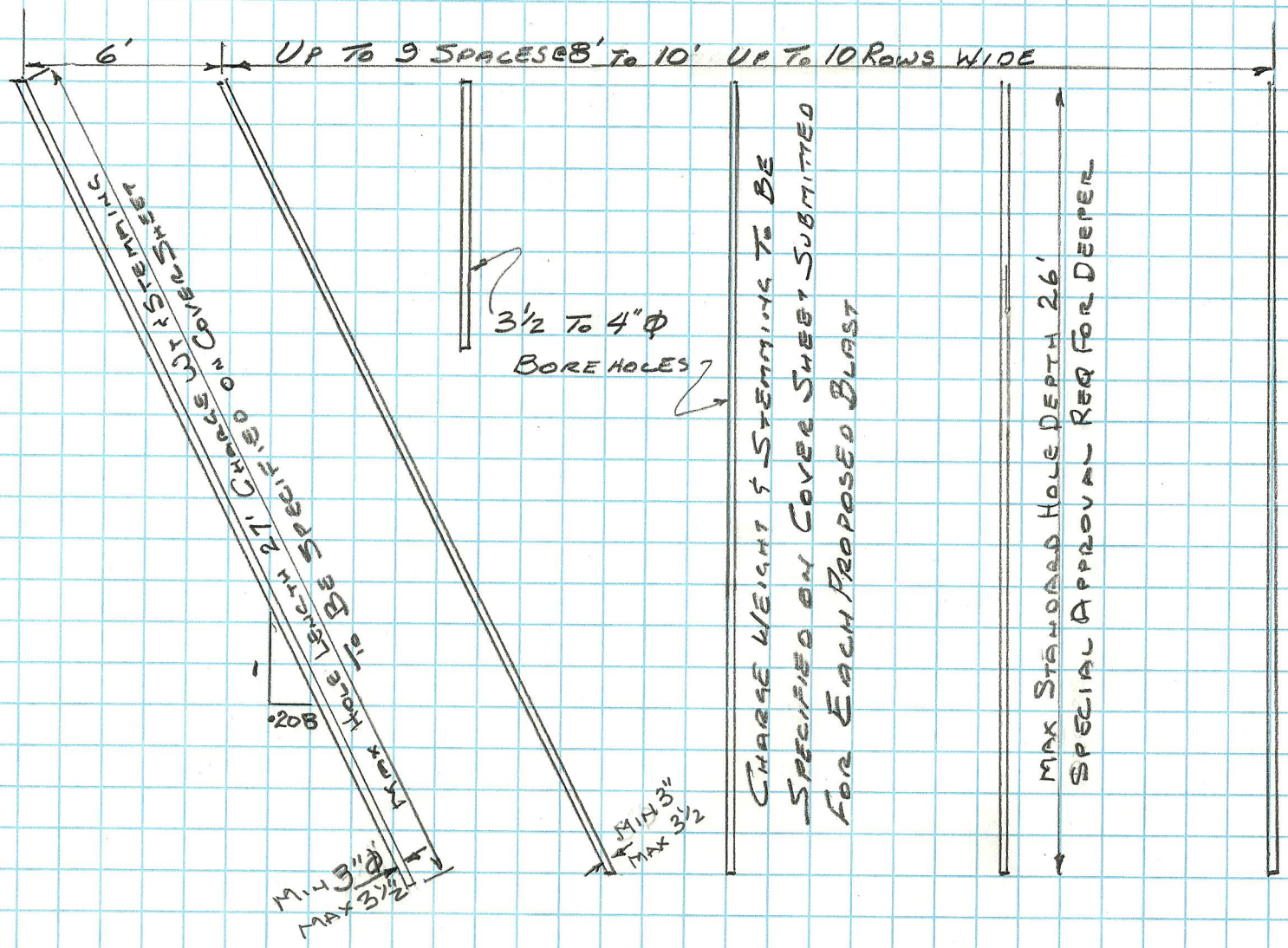
STANDARD BLAST DESIGN COMPONENT A

SCALE 1" = 20'

NOTES:

1) PLAN A IS SUITABLE FOR BLASTING LAPILLI TUFF IN AREAS WHERE THE FREE FACE IS WITHIN 50' OF I-90 AND SHOULD BE USED WHEN ROCK MOVEMENT IS NEEDED TO BE AS PARALLEL TO THE PRESPLIT AS POSSIBLE.

2) IF SHOT IS TO BE MORE THAN 10 ROWS DEEP PRESPLIT SHOULD BE SHOT SEPARATELY



STANDARD BLAST DESIGN COMPONENT B

SCALE 1" = 5'