

COMPANY UNION OIL CO. OF CAL. TOTAL DEPTH 6824'
 FIELD BACA SPUD DATE NOV. 16, 1974
 WELL #14 COMPLETION DATE _____
 COUNTY SANDOVAL DRILLING CONTRACTOR LOFFLAND
 STATE NEW MEXICO ENGINEER STINNETT
 LOCATION REDONDO CREEK GEOLOGIST SLODOWSKI
EL. 8605'

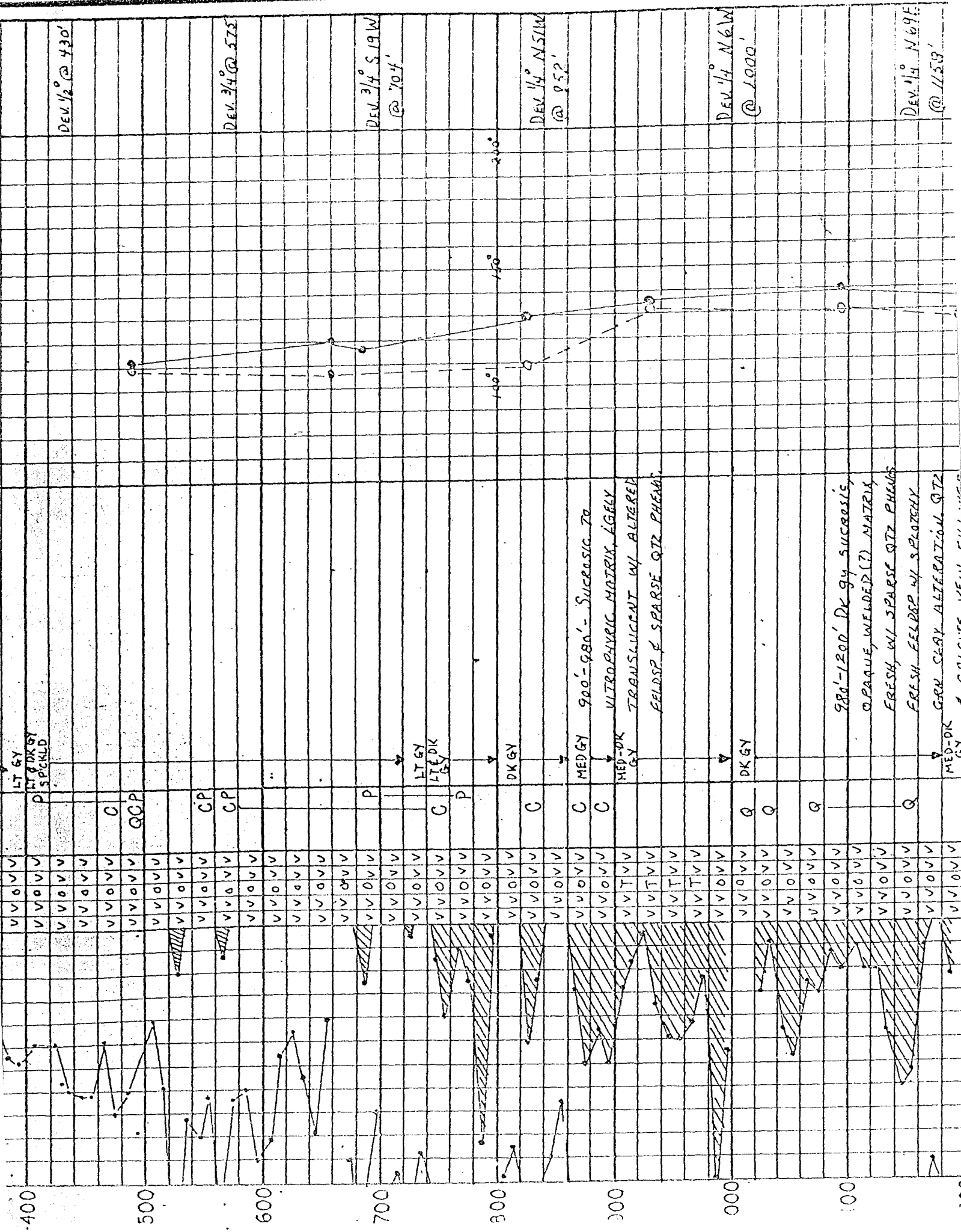
CASING RECORD
20": 193' TO SURFACE, CMTD.
13 3/8": 1452' " " "
9 5/8": 3074' TO 1371', CMTD.

EXPLANATION

DRILLING NB - NEW BIT RRB - RERUN BIT CB - CORE BIT LC - LOST CIRCULATION DEV - DEVIATION DST - DRILL STEM TEST	ROCK <input type="checkbox"/> SHALE <input type="checkbox"/> SILTSTONE <input type="checkbox"/> SANDSTONE <input checked="" type="checkbox"/> CONGLOMERATE <input type="checkbox"/> LIMESTONE <input checked="" type="checkbox"/> DOLOMITE <input checked="" type="checkbox"/> GYP, ANHYD.	<input checked="" type="checkbox"/> CHERT <input checked="" type="checkbox"/> VOLCANICS <input checked="" type="checkbox"/> INTRUSIVE <input checked="" type="checkbox"/> TUFF <input checked="" type="checkbox"/> METAMORPHIC <input type="checkbox"/> _____ <input type="checkbox"/> _____	MINERALS C - CALCITE CHL - CHLORITE CEL - CELADONITE CL - CLAYS D - DOLOMITE E - EPIDOTE F - FELDSPAR	K - KAOLINITE P - PYRITE Q - QUARTZ Z - ZEOLITES V - VEINS DIS. DISSEMINATED	PHYSICAL - CHEMICAL D.H. - DOWN HOLE B.H. - BOTTOM HOLE F.L. - FLOW LINE T. - TEMPERATURE P. - PRESSURE T.C. - TIME SINCE CIRCULATION W.H. - WELL HEAD PPM - PARTS PER MILLION
--	--	--	---	---	---

TUFF MATRIX: (O) OPAQUE (T) TRANSLUCENT

DEPTH	PENETRATION DATA		LITHOLOGY				PHYSICAL - CHEMICAL DATA			MISC.		
	<input type="checkbox"/> FT./HR.	<input checked="" type="checkbox"/> MIN/FT. x 100	PRIMARY LITH	SECONDARY MINERALS	DESCRIPTION	FLOWLINE TEMP.	SUCTION					
	100 mins.	50	100 %	0		100°	150°	200°				
0-100	Drlg 17 1/2" hole w/ mud. BIT #2 RR 17 1/2" HCS 14 200' / 22 1/2 hrs.		0	0	0	0	BRN, WHY, GY	0-260' GRAVEL - WX'D VOLCS, MOSTLY TUFF, SOME RHYOLITE. MUCH KAOLIN-ITIC ALTERATION. PYRITIC				DEV. 1/2° @ 70'
100-200	At 200' open hole to 26", set 26" CSG 193' to surf.		0	0	0	0		260-900' TUFF - WELDED, OPAQ, SUCROSIC MATRIX W/ LT GY ALTERED FELDSP PHENOS. DK GY MATRIX IS SPLTCHY -				DEV. 1/4° @ 120'
200-300	Drill 17 1/2" hole w/ mud. BANDEYER H.O. 26" HCS 3 PT BIT #3 RR 17 1/2" HCS 4 JS 1257' / 230 hrs		0	0	0	0	P	MED GY BLEACHED TO LT GY IN 15% TO 95% OF SAMPLES. PYRITIC				DEV. 1/4° @ 312'
300-400			0	0	0	0						
400-500			0	0	0	0						
500-600			0	0	0	0						
600-700			0	0	0	0						
700-800			0	0	0	0						
800-900			0	0	0	0						
900-1000			0	0	0	0						



LT & DKGY SPICLED

MED-GY 900'-980' - SUCCESSED TO VITROPHANIC MATRIX, LARGELY TRANSLUCENT W/ ALTERED FELDSP & SPARSE QTZ PHENOC.

980'-1200' Dk gy successis, OPAQUE, WELDED (?) MATRIX FRESH, W/ SPARSE QTZ PHENOC FRESH FELDSP W/ SPATITE GRN CLAY ALTERATION QTZ

DEV $1/2^\circ$ @ 430'

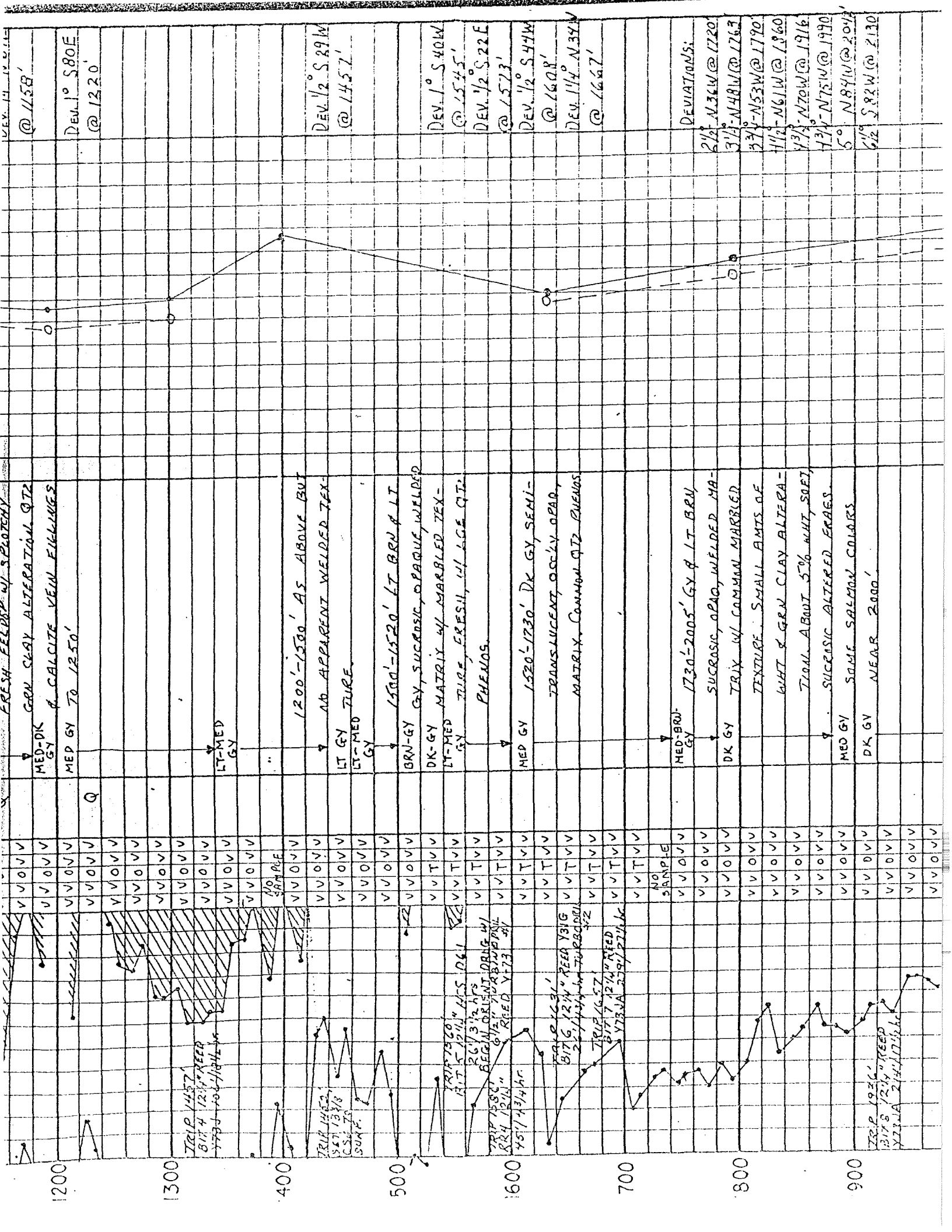
DEV $3/4^\circ$ @ 575'

DEV $3/4^\circ$ S 19 W @ 704'

DEV $1/4^\circ$ N 51 W @ 952'

DEV $1/4^\circ$ N 61 W @ 1000'

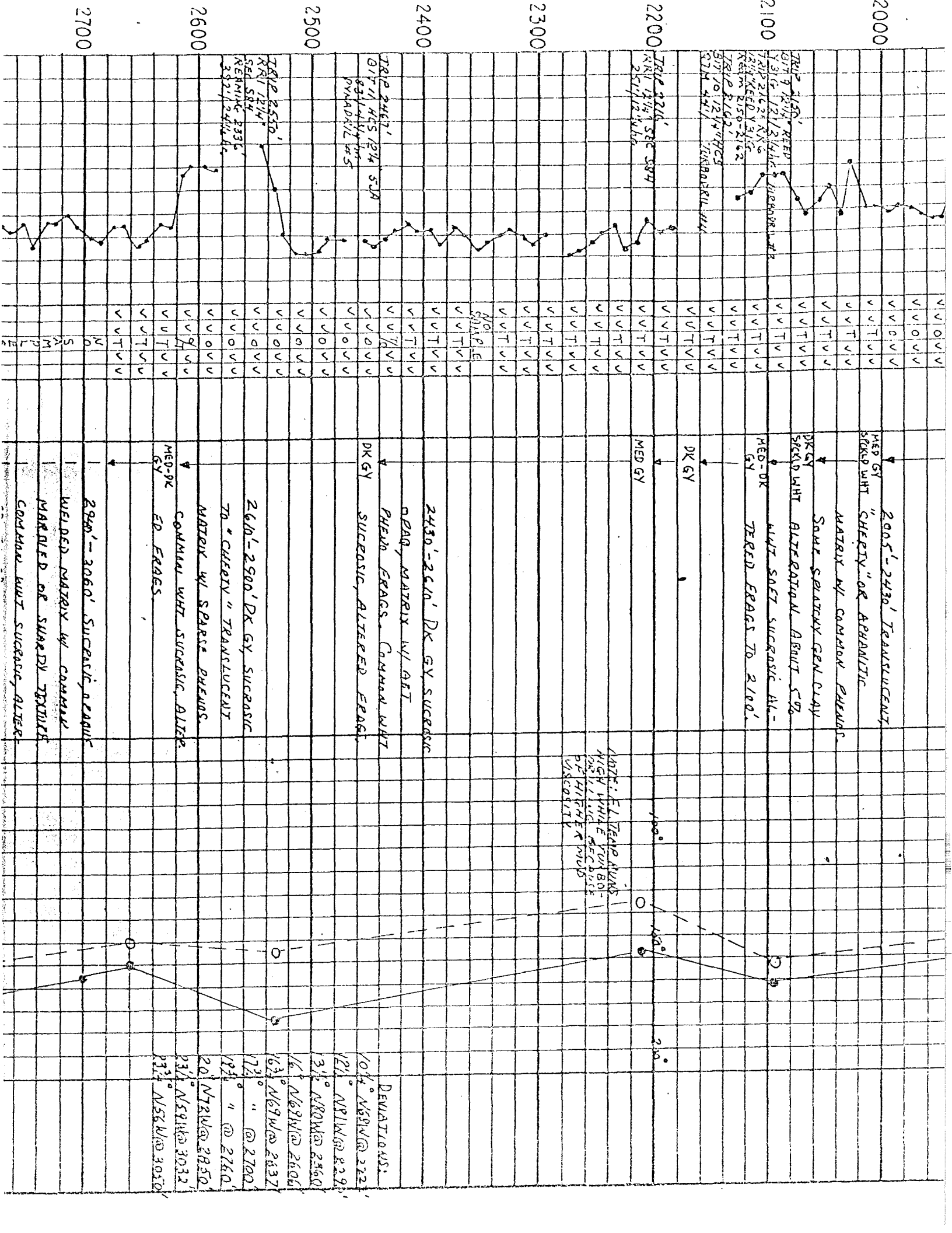
DEV $1/4^\circ$ N 69 E @ 1158'



FRESH FELDSPAR SPLOTZ
 GRN SLAY ALTERATION QTZ & CALCITE VEIN FINGERING
 MED-DK GY
 MED GY TO 1250'
 Q
 LT-MED GY
 " 1200'-1500' AS ABOVE BUT NO APPARENT WELDED TEXTURE
 LT GY
 LT-MED GY
 GRN-GY GY, SUCROSIC, OPAQUE, WELDED
 DK-GY MATRIX W/ MARBLED TEXTURE, FRESH, W/ LGE QTZ PHENOS.
 MED GY 1520'-1730' DK GY, SEMI-TRANSLUCENT, OPAQUE, OPAQUE MATRIX, COMMON QTZ PHENOS
 MED-BRN GY 1730'-2005' GY & LT BRN
 DK GY SUCROSIC, OPAQUE, WELDED MATRIX W/ COMMON MARBLED TEXTURE. SMALL AMTS OF WHT & GRN CLAY ALTERATION. ABOUT 5% WHT, SOFT, SUCROSIC ALTERED FRAGS.
 MED GY SOME SALMON COLORED
 DK GY NEAR 2000'

TRIP 1457'
 BIT 4 12 1/4" REEF
 Y133A 10-6-1042
 NO SAMPLE
 Y133A 10-6-1042
 Y133A 10-6-1042
 TRIP 1457'
 BIT 4 12 1/4" REEF
 Y133A 10-6-1042
 TRIP 1545'
 BIT 5 12 1/4" REEF
 Y133A 10-6-1042
 TRIP 1573'
 BIT 5 12 1/4" REEF
 Y133A 10-6-1042
 TRIP 1608'
 BIT 6 12 1/4" REEF
 Y133A 10-6-1042
 TRIP 1667'
 BIT 7 12 1/4" REEF
 Y133A 10-6-1042
 TRIP 1720'
 BIT 8 12 1/4" REEF
 Y133A 10-6-1042
 TRIP 1767'
 BIT 9 12 1/4" REEF
 Y133A 10-6-1042
 TRIP 1770'
 BIT 9 12 1/4" REEF
 Y133A 10-6-1042
 TRIP 1860'
 BIT 10 12 1/4" REEF
 Y133A 10-6-1042
 TRIP 1916'
 BIT 11 12 1/4" REEF
 Y133A 10-6-1042
 TRIP 1990'
 BIT 12 12 1/4" REEF
 Y133A 10-6-1042
 TRIP 2047'
 BIT 13 12 1/4" REEF
 Y133A 10-6-1042
 TRIP 2130'
 BIT 14 12 1/4" REEF
 Y133A 10-6-1042

DEV. 1/2° S 80° E @ 1158'
 DEV. 1/2° S 89° W @ 1457'
 DEV. 1° S 40° W @ 1545'
 DEV. 1/2° S 22° E @ 1573'
 DEV. 1/2° S 41° W @ 1608'
 @ 1667'
 DEV. 1/2° S 41° W @ 1720'
 @ 1608'
 DEV. 1 1/4° N 34° W @ 1767'
 @ 1667'
 DEVIATIONS:
 2 1/2° N 34° W @ 1720'
 3 1/4° N 48° W @ 1767'
 3 3/4° N 53° W @ 1770'
 1 1/2° N 61° W @ 1860'
 4 3/4° N 70° W @ 1916'
 4 3/4° N 75° W @ 1990'
 5° N 84° W @ 2047'
 6 1/2° S 82° W @ 2130'



2000

2005'-2430' TRANSLUCENT
 MED GY
 "CHERRY" OR APHALITIC
 MATRIX W/ COMMON PEARLS

SOFT SLATY GEN CLAY
 ALTERATIONAL ABOUT 5%
 DKG
 SPKID WHT

WHT SOFT SUCRASIC AL-
 MED-OK
 GY
 TERED ERAGS TO 2100'

DK GY

MED GY

NOTE: EL TEND ALONG
 HIGH WHITE TONBO-
 DETAILED RECORD
 VISCOUSLY

2400

2430'-2600' DK GY SUCRASIC
 OPAQ, MATRIX W/ AET
 PEARL ERAGS. COMMON WHT

DK GY
 SUCRASIC, ALTERED ERAGS

2500

2600'-2500' DK GY SUCRASIC
 TO "CHERRY" TRANSLUCENT
 MATRIX W/ SPARSE PEARLS

COMMON WHT SUCRASIC, ALTER
 ED ERAGS
 MED-OK
 GY

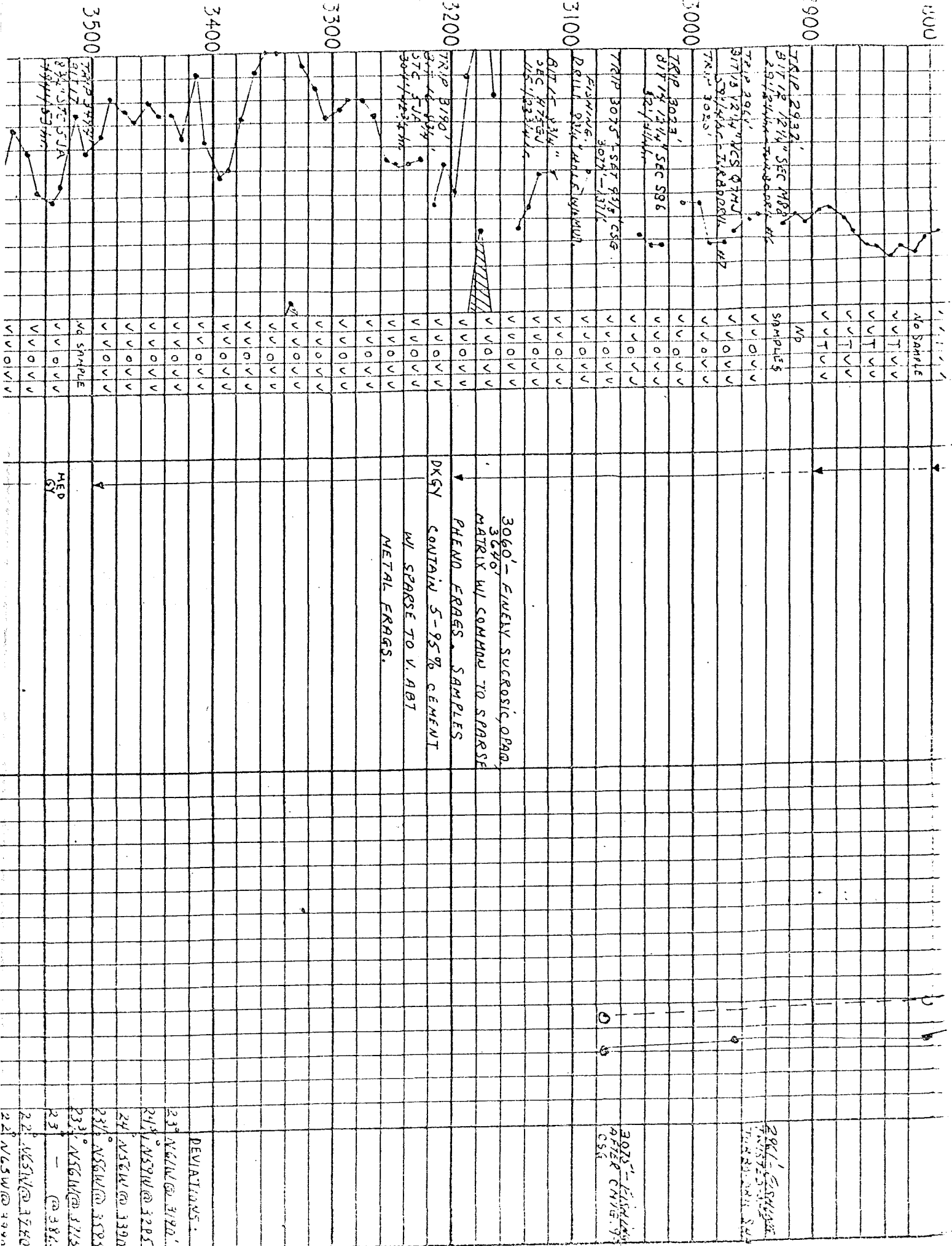
2600

2660'-3060' SUCRASIC, OPAQUE
 WELDED MATRIX W/ COMMON
 MARKED OR SHARDY TEXTURE
 COMMON WHT SUCRASIC, ALTER

2700

DEVIATIONS:
 10 1/2° N69W @ 222'
 21° N81W @ 229'
 3 1/2° N80W @ 2360'
 1/6° N63W @ 2606'
 16 3/4° N69W @ 2637'
 17 3/4° " @ 2700'
 19 1/2° " @ 2760'
 20° N72W @ 2850'
 23 1/2° N59W @ 3032'
 27 1/2° N56W @ 3050'

CONTINUED FROM PREVIOUS PAGE



TRIP 2932'
BIT 12 1/2" SEC 1988
2912-2944m TUBEDORE HT

NO SAMPLE
VT V V
VT V V
VT V V
VT V V

3060' - FINELY SUCROSIIC OPAL
3070' MATRIX W/ COMMON TO SPARSE
PHENO FRAGS. SAMPLES

DEVIATIONS:
23° N64W @ 3190'
24° N59W @ 3285
24° N56W @ 3390
23° N56W @ 3585

TRIP 3023'
BIT 12 1/2" SEC 1988
3012-3044m TUBEDORE HT

NO SAMPLE
VT V V
VT V V
VT V V
VT V V

3070' - DQSY CONTAIN 5-95% CEMENT
W/ SPARSE TO V. ABT METAL FRAGS.

22° N65W @ 3740
23° - @ 3865

TRIP 3075'
BIT 12 1/2" SEC 1988
3072-3104m TUBEDORE HT

NO SAMPLE
VT V V
VT V V
VT V V
VT V V

3075' - DQSY CONTAIN 5-95% CEMENT
W/ SPARSE TO V. ABT METAL FRAGS.

22° N65W @ 3990

TRIP 3110'
BIT 12 1/2" SEC 1988
3102-3134m TUBEDORE HT

NO SAMPLE
VT V V
VT V V
VT V V
VT V V

3060' - FINELY SUCROSIIC OPAL
3070' MATRIX W/ COMMON TO SPARSE
PHENO FRAGS. SAMPLES

22° N65W @ 3740
23° - @ 3865

TRIP 3190'
BIT 12 1/2" SEC 1988
3182-3214m TUBEDORE HT

NO SAMPLE
VT V V
VT V V
VT V V
VT V V

3060' - FINELY SUCROSIIC OPAL
3070' MATRIX W/ COMMON TO SPARSE
PHENO FRAGS. SAMPLES

22° N65W @ 3740
23° - @ 3865

TRIP 3240'
BIT 12 1/2" SEC 1988
3232-3264m TUBEDORE HT

NO SAMPLE
VT V V
VT V V
VT V V
VT V V

3060' - FINELY SUCROSIIC OPAL
3070' MATRIX W/ COMMON TO SPARSE
PHENO FRAGS. SAMPLES

22° N65W @ 3740
23° - @ 3865

TRIP 3290'
BIT 12 1/2" SEC 1988
3282-3314m TUBEDORE HT

NO SAMPLE
VT V V
VT V V
VT V V
VT V V

3060' - FINELY SUCROSIIC OPAL
3070' MATRIX W/ COMMON TO SPARSE
PHENO FRAGS. SAMPLES

22° N65W @ 3740
23° - @ 3865

TRIP 3340'
BIT 12 1/2" SEC 1988
3332-3364m TUBEDORE HT

NO SAMPLE
VT V V
VT V V
VT V V
VT V V

3060' - FINELY SUCROSIIC OPAL
3070' MATRIX W/ COMMON TO SPARSE
PHENO FRAGS. SAMPLES

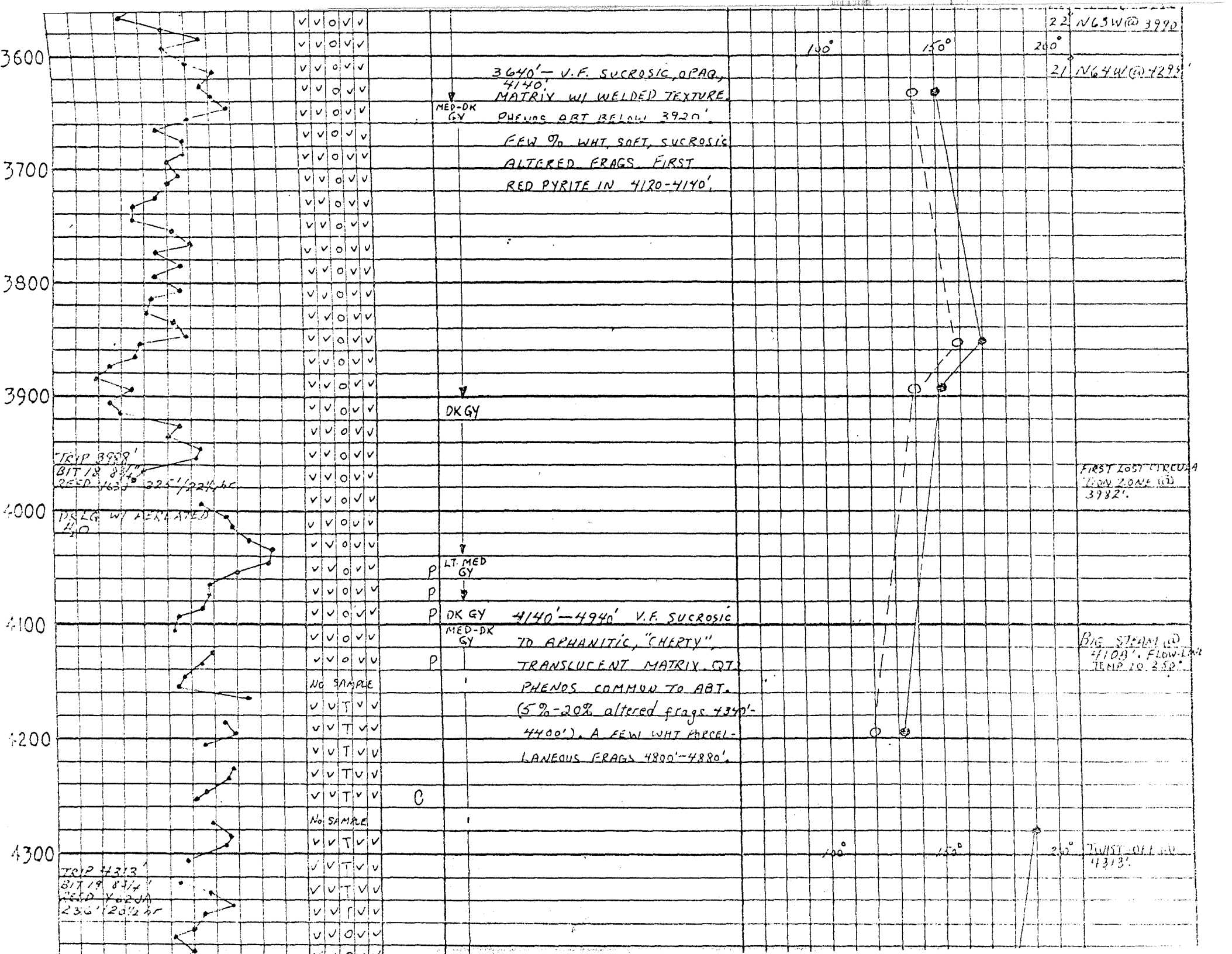
22° N65W @ 3740
23° - @ 3865

TRIP 3390'
BIT 12 1/2" SEC 1988
3382-3414m TUBEDORE HT

NO SAMPLE
VT V V
VT V V
VT V V
VT V V

3060' - FINELY SUCROSIIC OPAL
3070' MATRIX W/ COMMON TO SPARSE
PHENO FRAGS. SAMPLES

22° N65W @ 3740
23° - @ 3865



DEVIATIONS:

214° 4661400 243

014° 4681400 753

213° 4681400 4852

219° 4651400 1750

214° 4661400 5896

4400

4500

4600

4700

4800

4900

5000

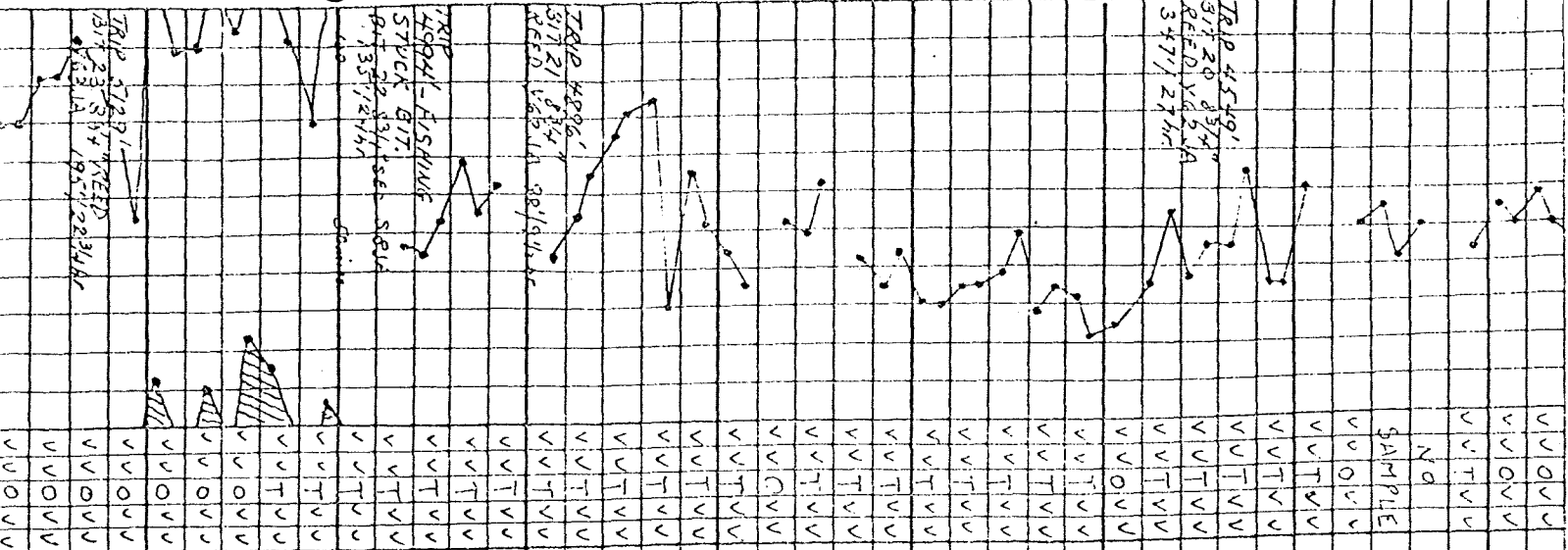
5100

TRIP 4549'
317.20 857'
REFD. 1951/2234A
3471/2744

TRIP 4806'
317.21 834'
REFD. 1951/2234A

TRIP 4941'-ASHHINE
STUCK BIT.
RT 20 341/566 SBU
1351/2144

TRIP 5129'
317.23 837'
REFD. 1951/2234A



v o v v

v o v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v T v v

v

RED
GY

LT-
MED GY

LT-
MED GY

MED
GY

MED-
DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

DK
GY

but common dk flesh

COLOR'D ELDSPRS.

5140'-5160' MARBLED WELL-

EQ, SUBOIL TEXTURE, MOTTLED

GROWN & BLK. ART PHEAS

5140'-5160' MARBLED WELL-

EQ, SUBOIL TEXTURE, MOTTLED

GROWN & BLK. ART PHEAS

5140'-5160' MARBLED WELL-

EQ, SUBOIL TEXTURE, MOTTLED

GROWN & BLK. ART PHEAS

5140'-5160' MARBLED WELL-

EQ, SUBOIL TEXTURE, MOTTLED

GROWN & BLK. ART PHEAS

5140'-5160' MARBLED WELL-

EQ, SUBOIL TEXTURE, MOTTLED

GROWN & BLK. ART PHEAS

5140'-5160' MARBLED WELL-

EQ, SUBOIL TEXTURE, MOTTLED

GROWN & BLK. ART PHEAS

5140'-5160' MARBLED WELL-

EQ, SUBOIL TEXTURE, MOTTLED

GROWN & BLK. ART PHEAS

5140'-5160' MARBLED WELL-

EQ, SUBOIL TEXTURE, MOTTLED

GROWN & BLK. ART PHEAS

5140'-5160' MARBLED WELL-

EQ, SUBOIL TEXTURE, MOTTLED

GROWN & BLK. ART PHEAS

5140'-5160' MARBLED WELL-

EQ, SUBOIL TEXTURE, MOTTLED

GROWN & BLK. ART PHEAS

5140'-5160' MARBLED WELL-

EQ, SUBOIL TEXTURE, MOTTLED

GROWN & BLK. ART PHEAS

5140'-5160' MARBLED WELL-

EQ, SUBOIL TEXTURE, MOTTLED

GROWN & BLK. ART PHEAS

5140'-5160' MARBLED WELL-

EQ, SUBOIL TEXTURE, MOTTLED

GROWN & BLK. ART PHEAS

5140'-5160' MARBLED WELL-

EQ, SUBOIL TEXTURE, MOTTLED

GROWN & BLK. ART PHEAS

5140'-5160' MARBLED WELL-

EQ, SUBOIL TEXTURE, MOTTLED

GROWN & BLK. ART PHEAS

214° 4661400 243

014° 4681400 753

213° 4681400 4852

219° 4651400 1750

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 243

014° 4681400 753

213° 4681400 4852

219° 4651400 1750

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

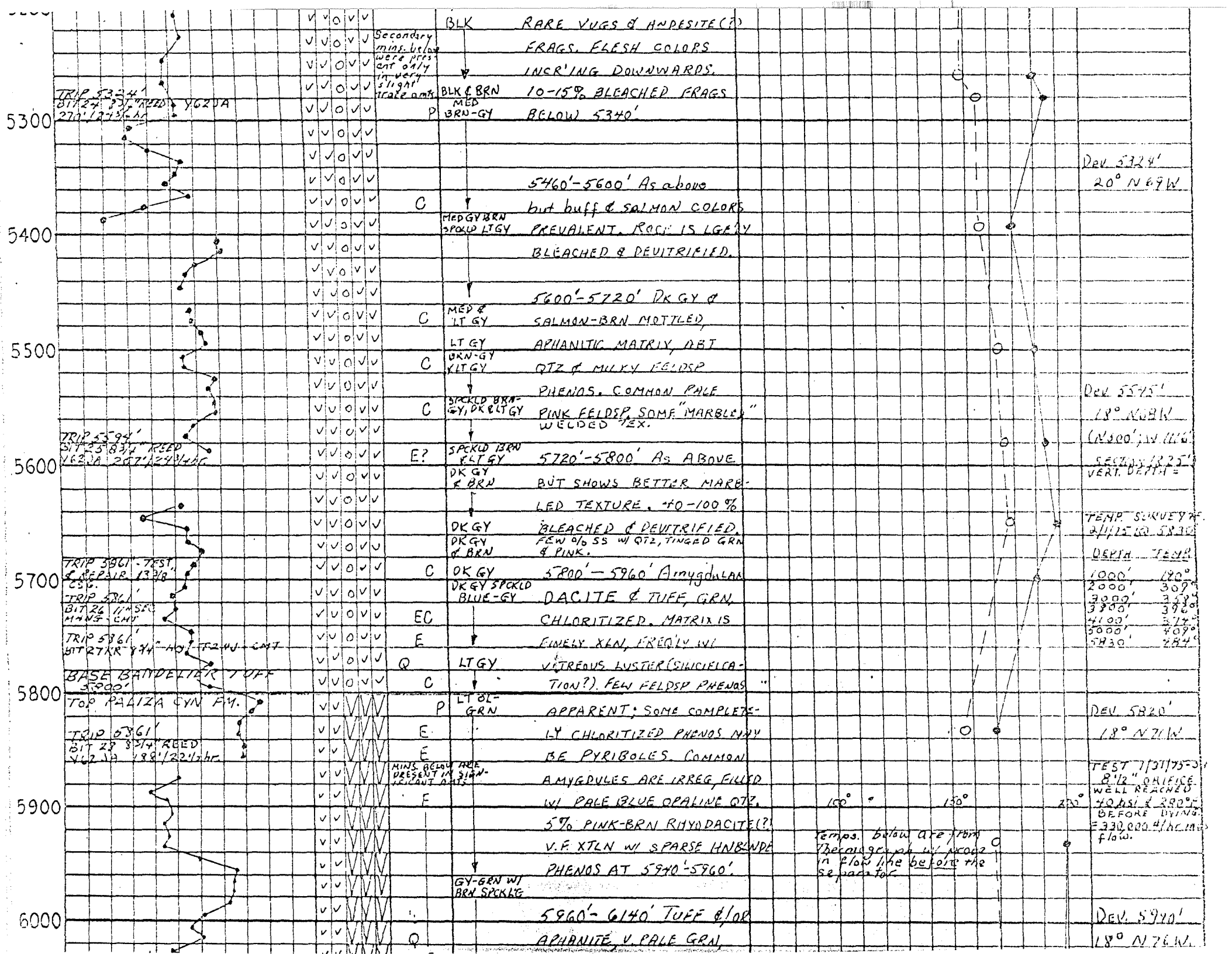
214° 4661400 5896

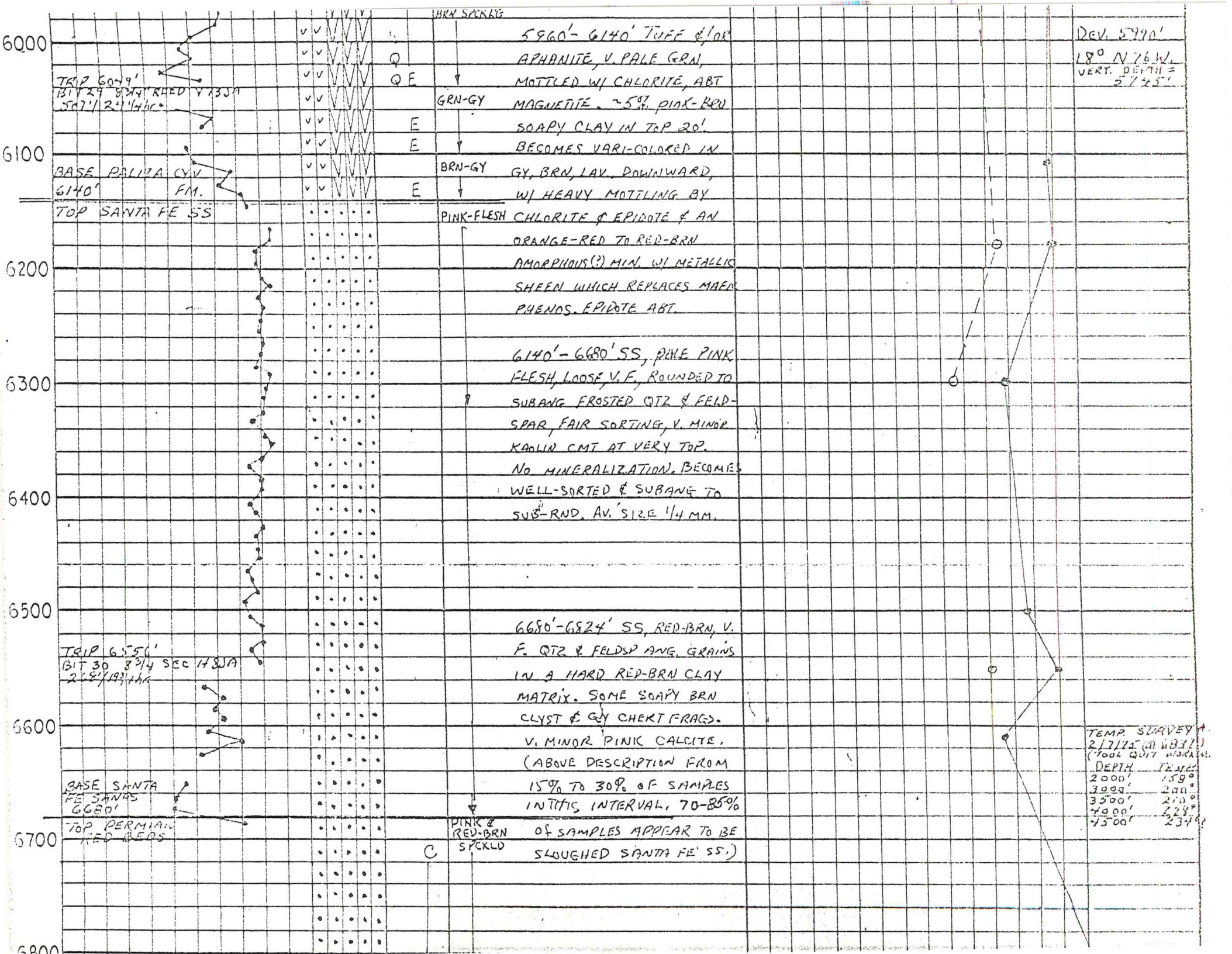
214° 4661400 5896

214° 4661400 5896

214° 4661400 5896

214° 4661400 5896





5800

5900

7000

7100

7200

7300

7400

7500

.....
.....
.....

C

T.D. 6824'

TEMP SURVEY
 217150 6837'

DEPTH	TEMP
3000'	18.7
4000'	17.5
5000'	16.8
6000'	16.2
6837'	15.8

7600

7700

7800

7900

8000

8100

8200

8300

The image shows a sheet of graph paper with a grid of small squares. A vertical line is drawn on the left side, creating a margin. The grid extends across the page, with a few faint, illegible markings scattered throughout. The numbers 7600 through 8300 are printed vertically along the right edge of the grid.