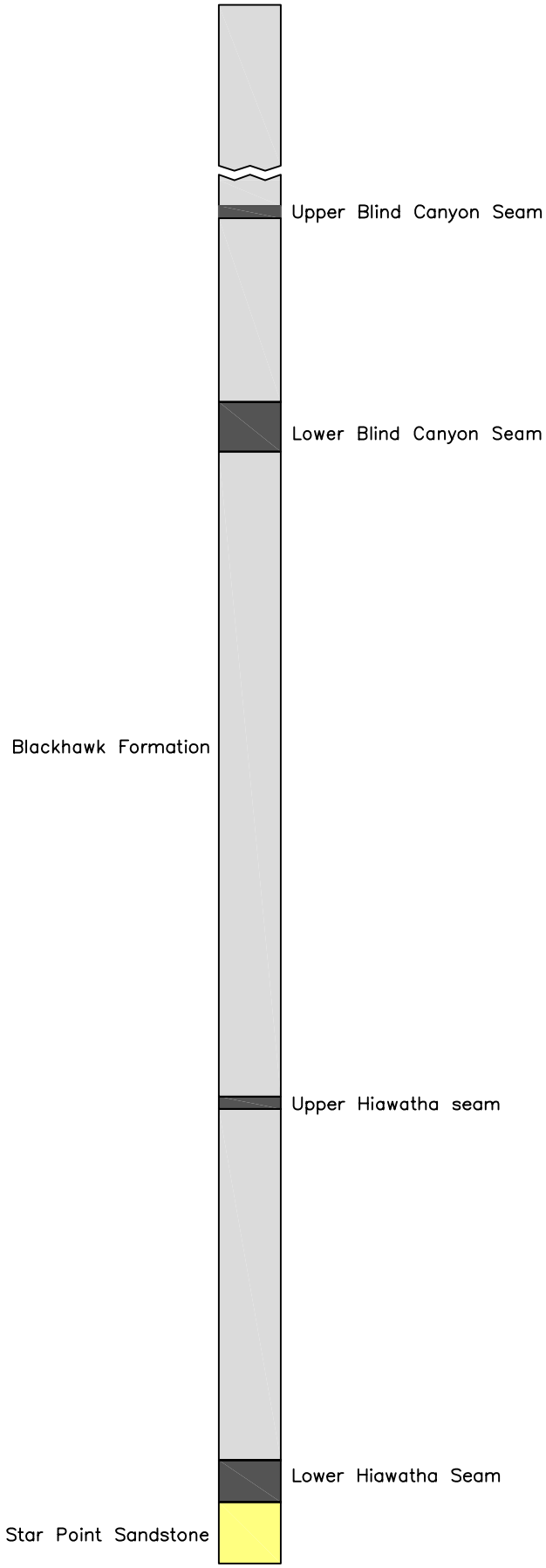


Lithology

- Undifferentiated Rock
- Sandstone
- Coal

NORTH HORN SITLA TRACT

GENERALIZED STRATIGRAPHIC COLUMN

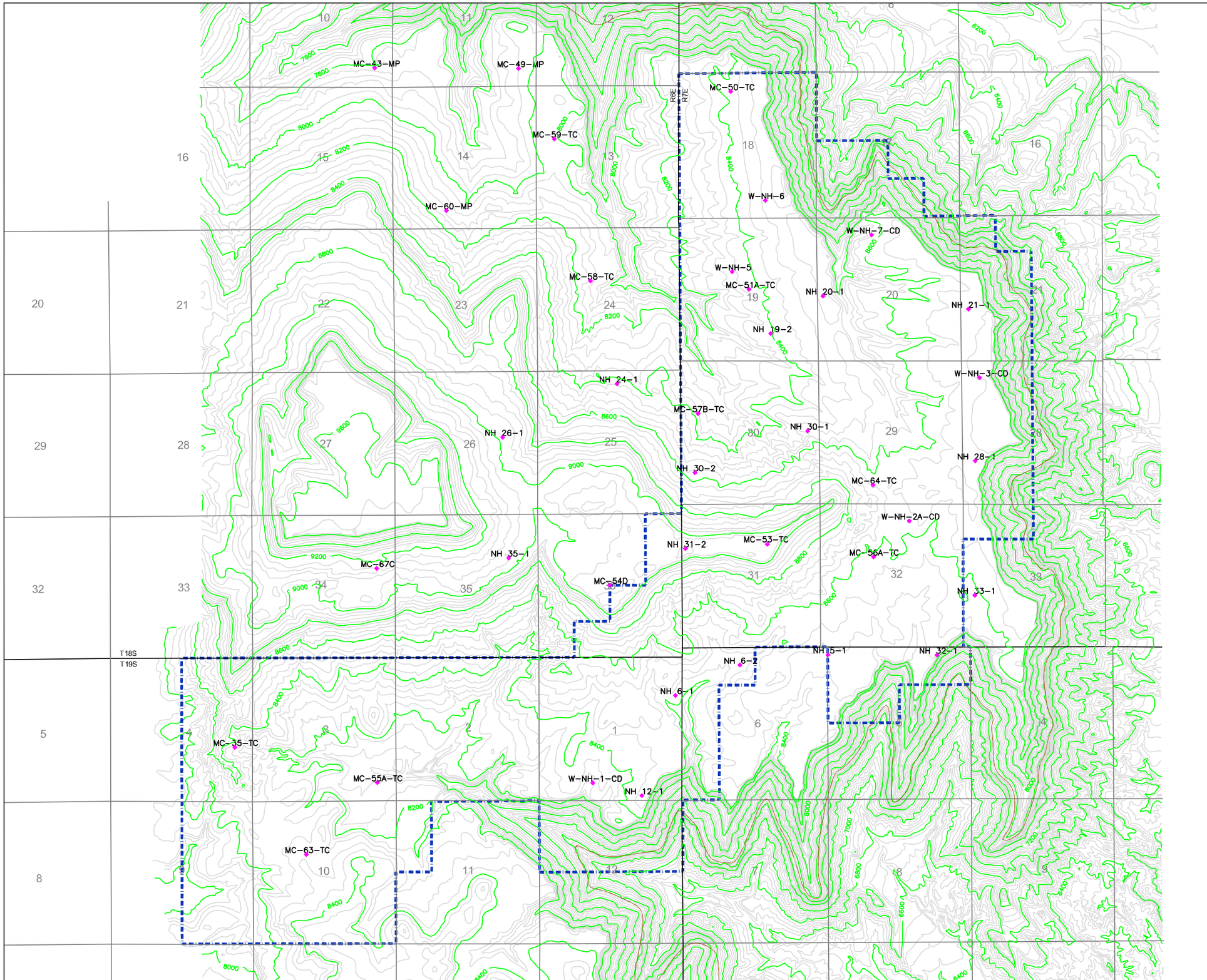
State of Utah
School and Institutional Trust Lands Administration

DATE: 3/1/2006

FIGURE 1

FILE: 3278COLUMN

NORWEST CORPORATION



LEGEND

- SITLA NORTH HORN TRACT BOUNDARY
- DRILL HOLE
- COAL SEAM OUTCROP
- TOPO (40' INTERVAL)

N

0 1000 2000 3000 4000 5000
FEET

SCALE: 1"=3500'

NORTH HORN SITLA TRACT

TOPOGRAPHY AND DRILL HOLE LOCATIONS

State of Utah
School and Institutional Trust Lands Administration

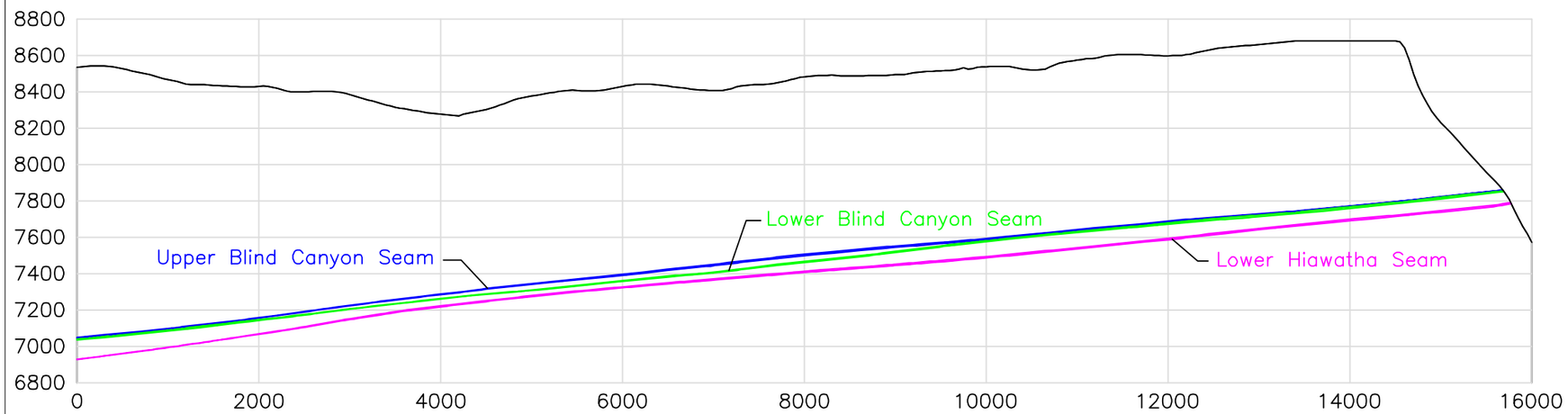
DATE: 3/1/2006

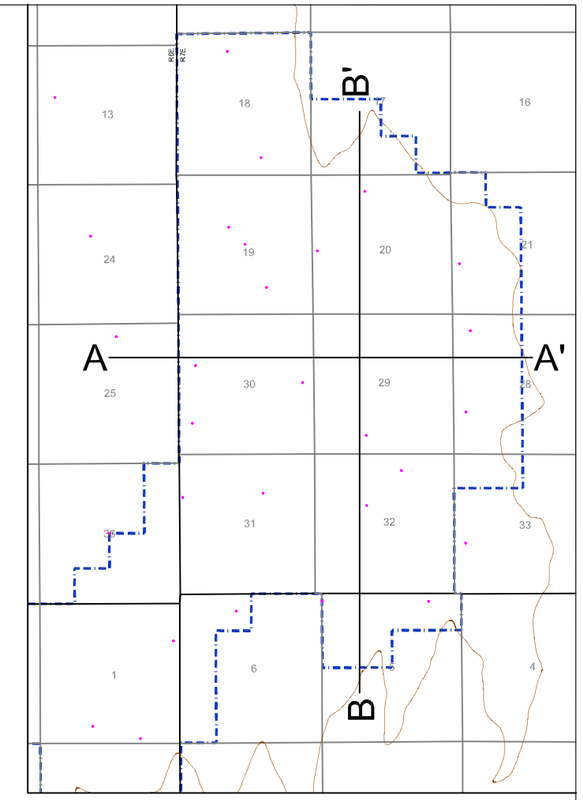
FIGURE 2

FILE: 3278-TOPO

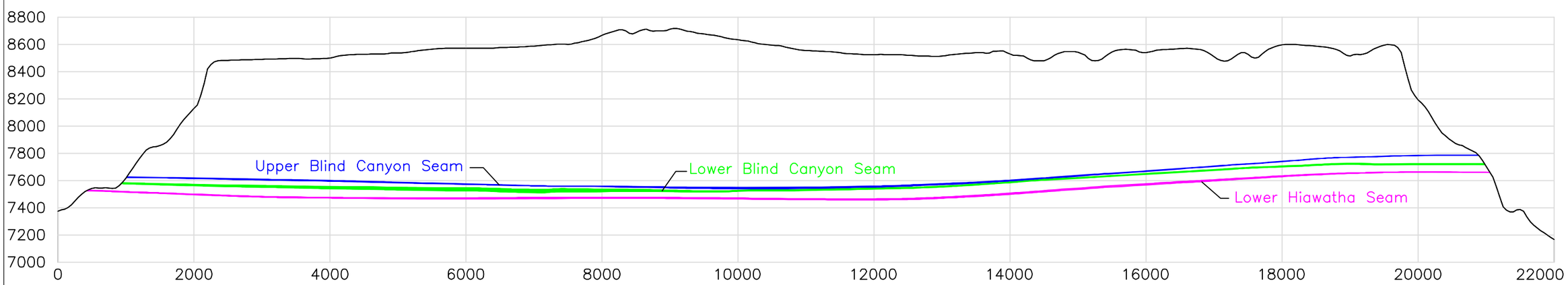
NORWEST CORPORATION

A - A'





B - B'



0 500 1000 1500 2000 2500
FEET

SCALE: H: 1"=1500'
V: 1"=750'

NORTH HORN SITLA TRACT

REPRESENTATIVE CROSS-SECTIONS

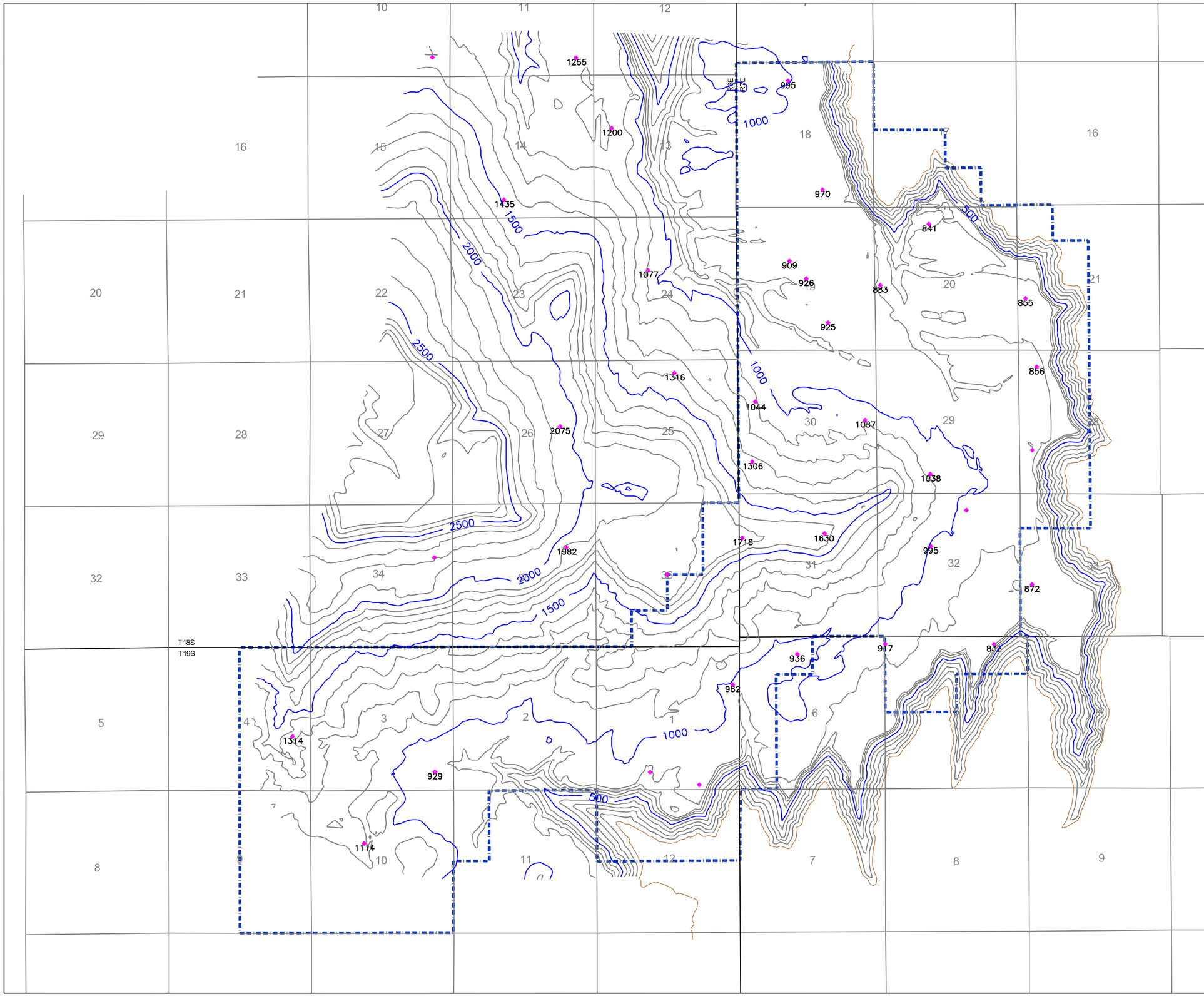
State of Utah
School and Institutional Trust Lands Administration

DATE: 3/5/2006

FIGURE 3

FILE: 3278-CS

NORWEST CORPORATION



LEGEND

- SITLA NORTH HORN TRACT BOUNDARY
- DRILL HOLE
- UPPER BLIND CANYON OUTCROP
- OVERBURDEN

N

0 1000 2000 3000 4000 5000
FEET

SCALE: 1"=3500'

NORTH HORN SITLA TRACT

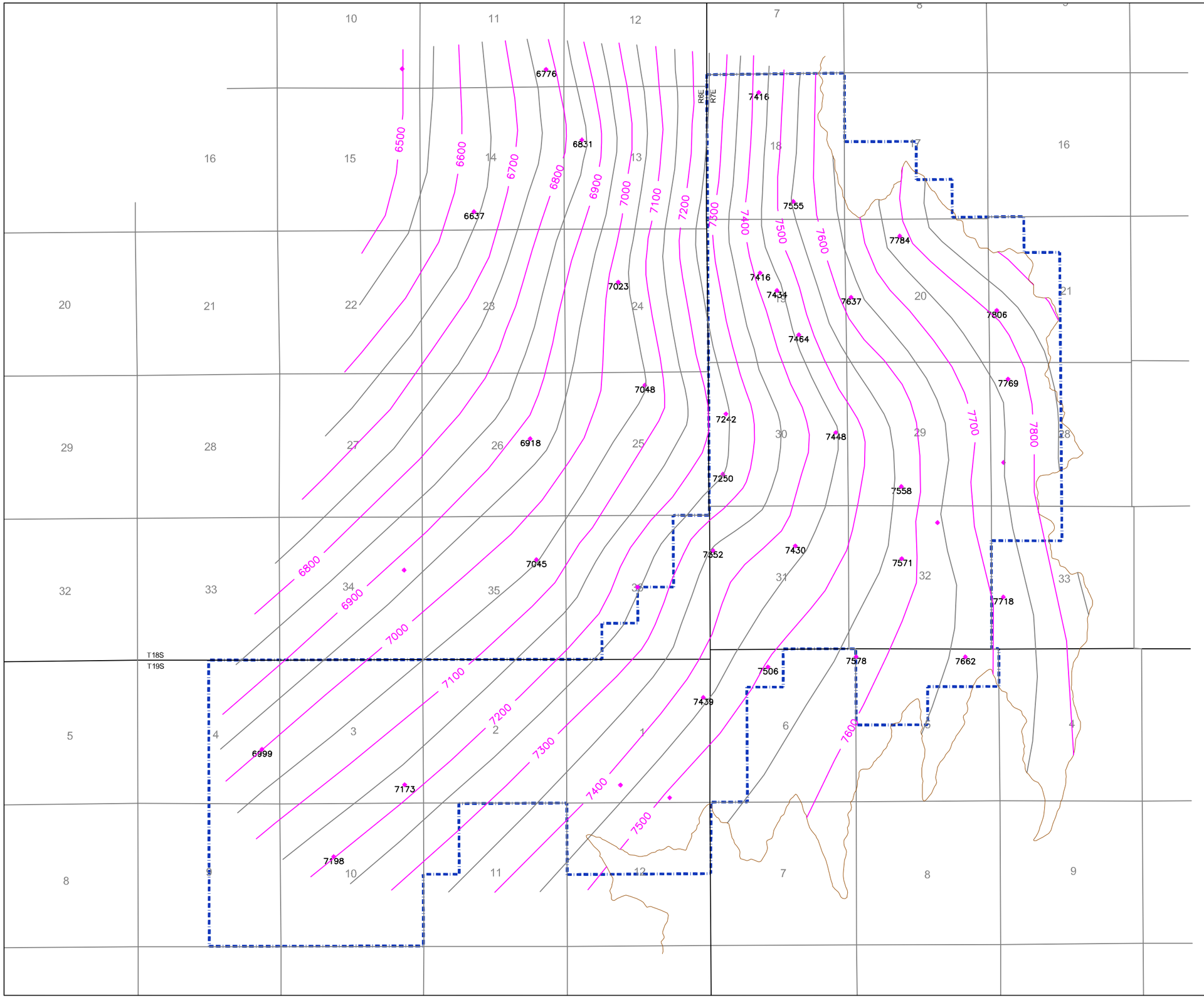
UPPER BLIND CANYON SEAM
OVERBURDEN ISOPACH

State of Utah
School and Institutional Trust Lands Administration

DATE: 3/5/2006 | FIGURE 4.1

FILE: 3278-BCU

NORWEST CORPORATION



LEGEND

- SITLA NORTH HORN TRACT BOUNDARY
- DRILL HOLE
- UPPER BLIND CANYON OUTCROP
- STRUCTURE

N

0 1000 2000 3000 4000 5000
FEET

SCALE: 1"=3500'

NORTH HORN SITLA TRACT

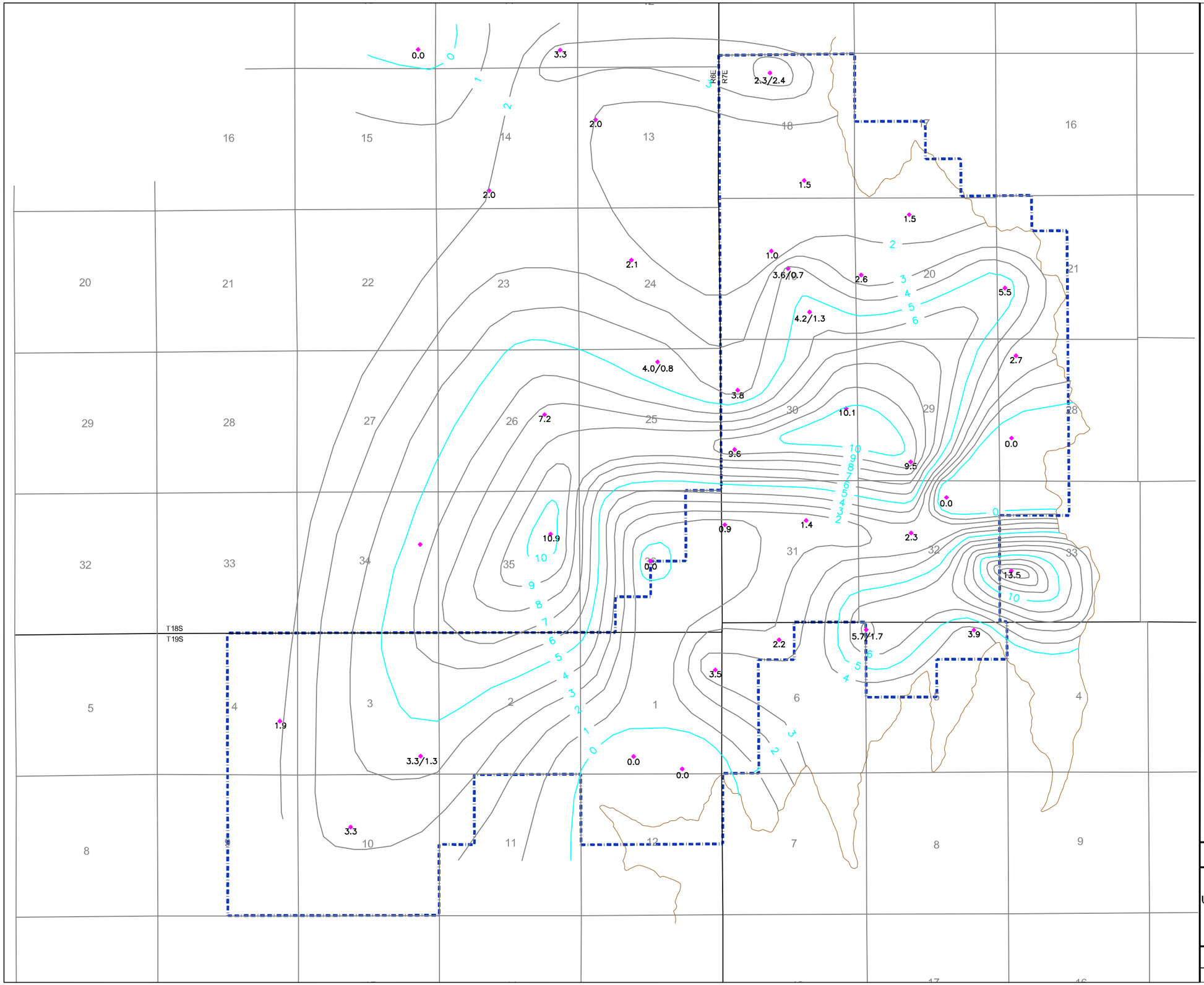
UPPER BLIND CANYON SEAM
TOP STRUCTURE

State of Utah
School and Institutional Trust Lands Administration

DATE: 3/5/2006 | FIGURE 4.2

FILE: 3278-BCU

NORWEST CORPORATION



LEGEND

- SITLA NORTH HORN TRACT BOUNDARY
- DRILL HOLE
- 4.3/1.2 COAL/PARTING THICKNESS
- UPPER BLIND CANYON OUTCROP
- SEAM THICKNESS

N

0 1000 2000 3000 4000 5000
FEET

SCALE: 1"=3500'

NORTH HORN SITLA TRACT

UPPER BLIND CANYON SEAM
ISOPACH

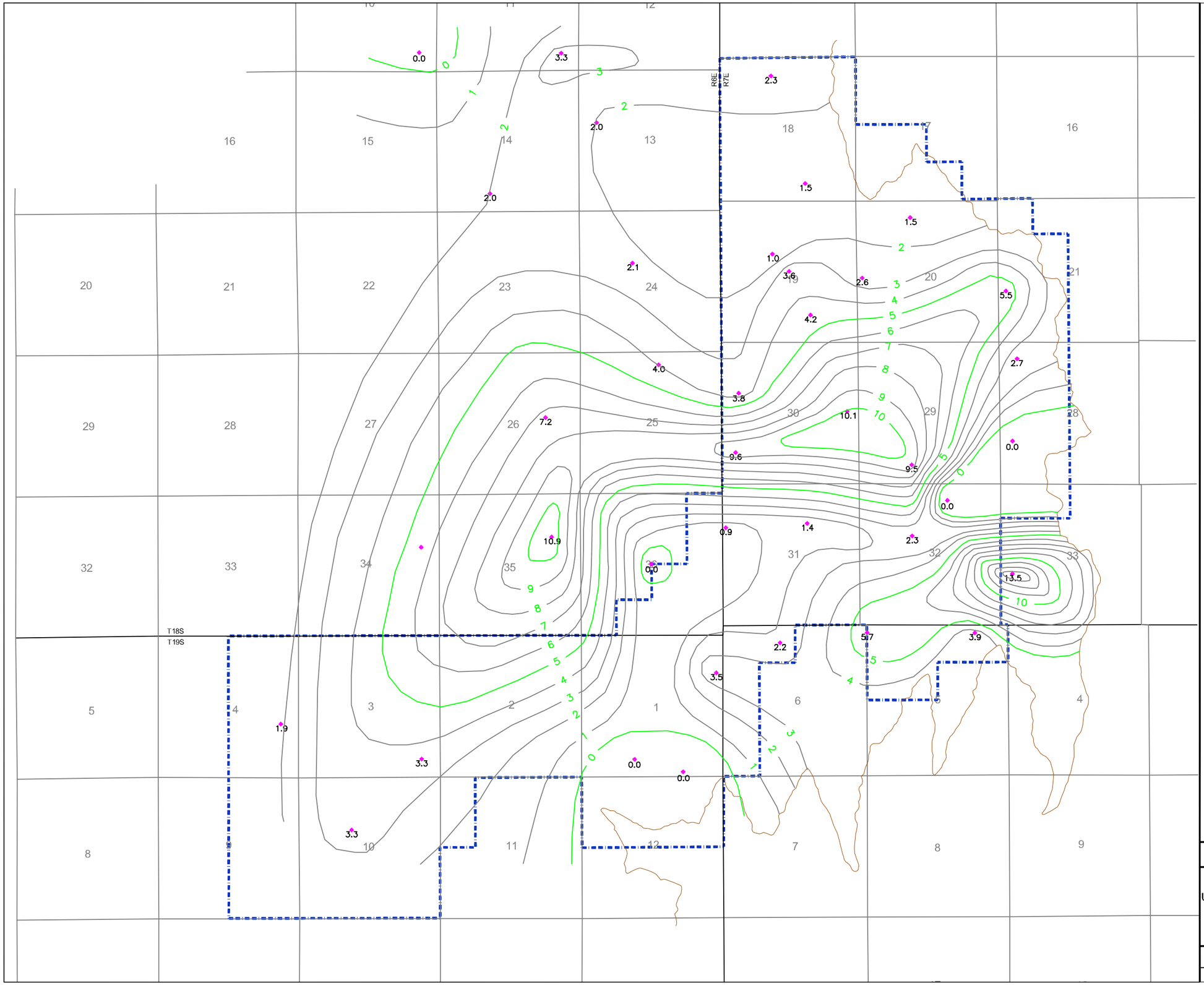
State of Utah
School and Institutional Trust Lands Administration

DATE: 3/5/2006

FIGURE 4.3

FILE: 3278-BCU

NORWEST CORPORATION



LEGEND

- SITLA NORTH HORN TRACT BOUNDARY
- DRILL HOLE
- UPPER BLIND CANYON OUTCROP
- COAL THICKNESS

N

0 1000 2000 3000 4000 5000
FEET

SCALE: 1"=3500'

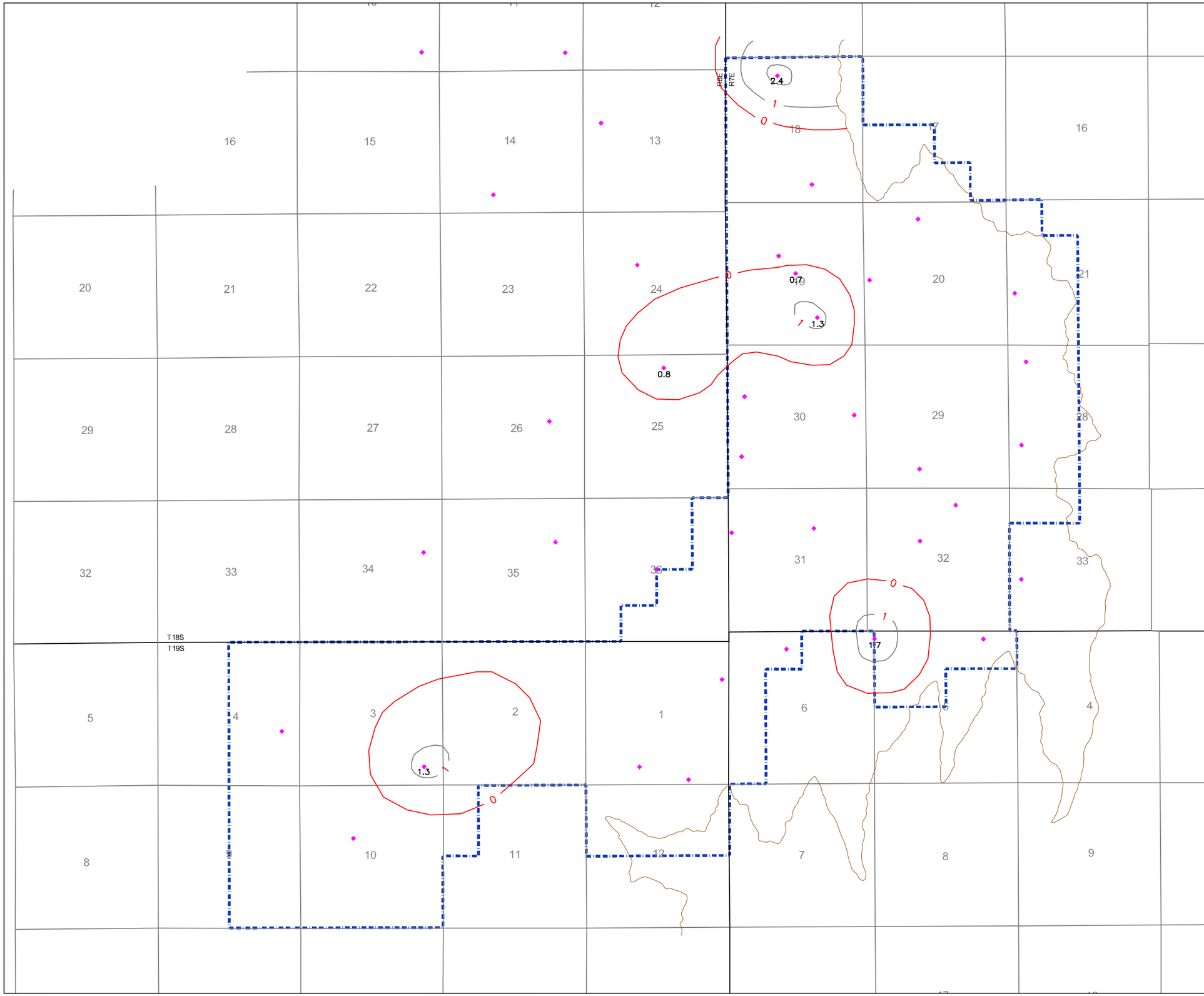
NORTH HORN SITLA TRACT

UPPER BLIND CANYON SEAM
COAL ISOPACH

State of Utah
School and Institutional
Trust Lands Administration

DATE: 3/5/2006
FIGURE 4.4
FILE: 3278-BCU

NORWEST
CORPORATION



LEGEND

- SITLA NORTH HORN TRACT BOUNDARY
- DRILL HOLE
- UPPER BLIND CANYON OUTCROP
- PARTING THICKNESS

N

0 1000 2000 3000 4000 5000
FEET

SCALE: 1"=3500'

NORTH HORN SITLA TRACT

UPPER BLIND CANYON SEAM
PARTING ISOPACH

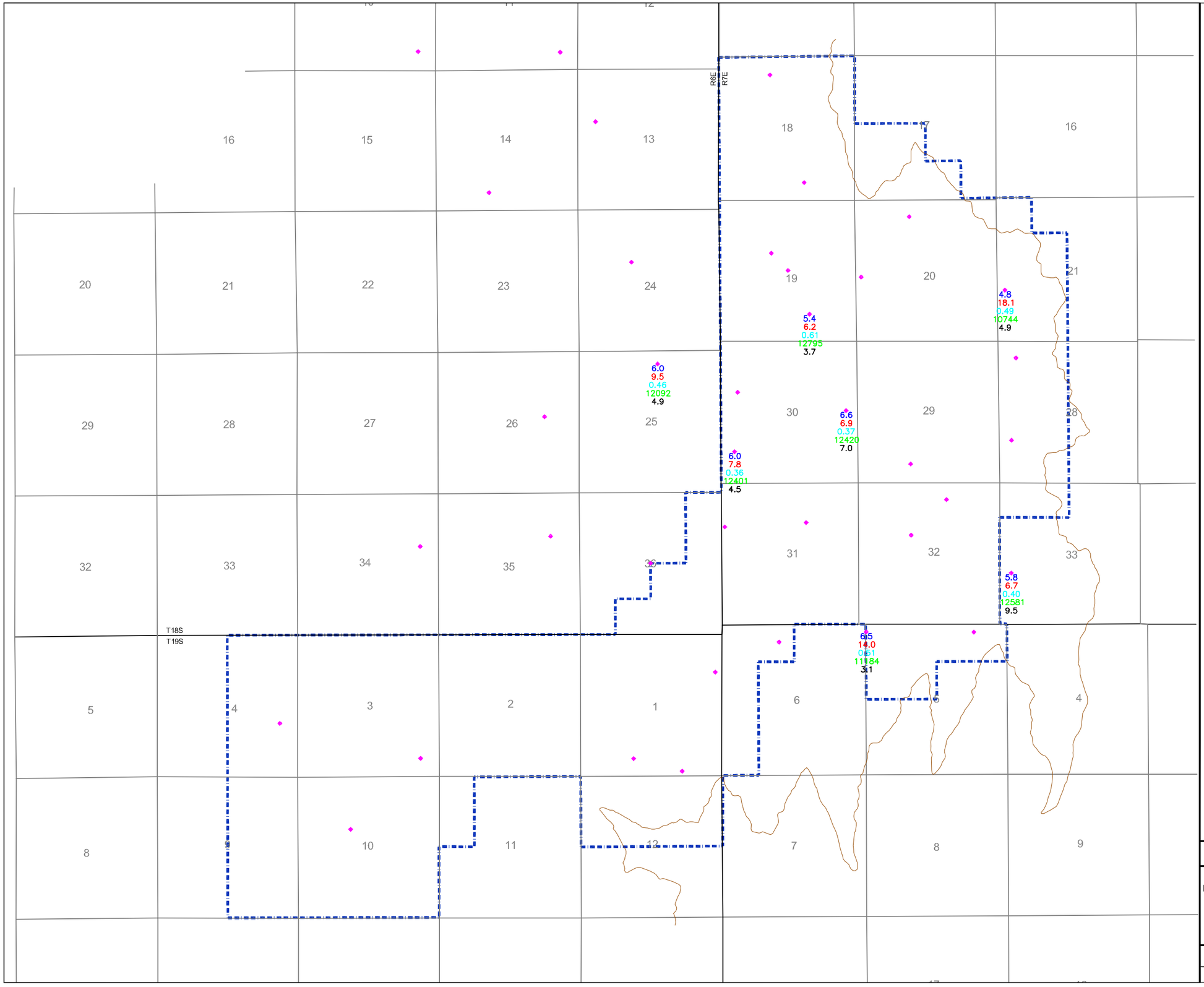
State of Utah
School and Institutional
Trust Lands Administration

DATE: 3/5/2006

FIGURE 4.5

FILE: 3278-BCU

NORWEST
CORPORATION



LEGEND

SITLA NORTH HORN TRACT BOUNDARY

DRILL HOLE

UPPER BLIND CANYON OUTCROP

4.8 MOISTURE%
18.1 ASH%
0.49 SULFUR%
10744 BTU/LB
4.9 SODIUM%

N

0 1000 2000 3000 4000 5000
FEET

SCALE: 1"=3500'

NORTH HORN SITLA TRACT

UPPER BLIND CANYON SEAM
QUALITY DATA
(AS RECEIVED BASE)

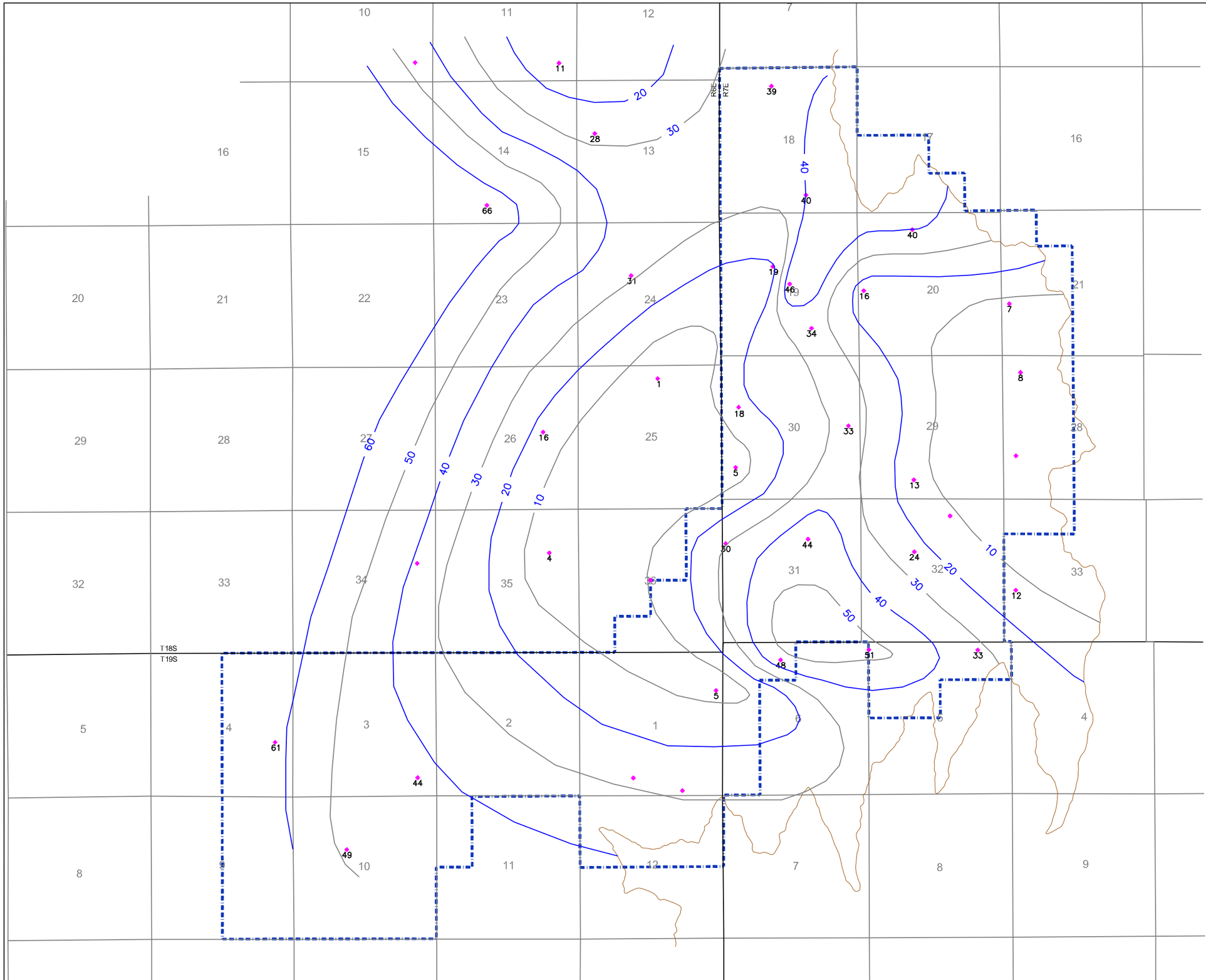
State of Utah
School and Institutional Trust Lands Administration

DATE: 3/5/2006

FIGURE 4.6

FILE: 3278-BCU

NORWEST CORPORATION



LEGEND

- SITLA NORTH HORN TRACT BOUNDARY
- DRILL HOLE
- UPPER BLIND CANYON OUTCROP
- INTERBURDEN

N

0 1000 2000 3000 4000 5000
FEET

SCALE: 1"=3500'

NORTH HORN SITLA TRACT

UPPER BLIND CANYON TO LOWER BLIND CANYON SEAM INTERBURDEN ISOPACH

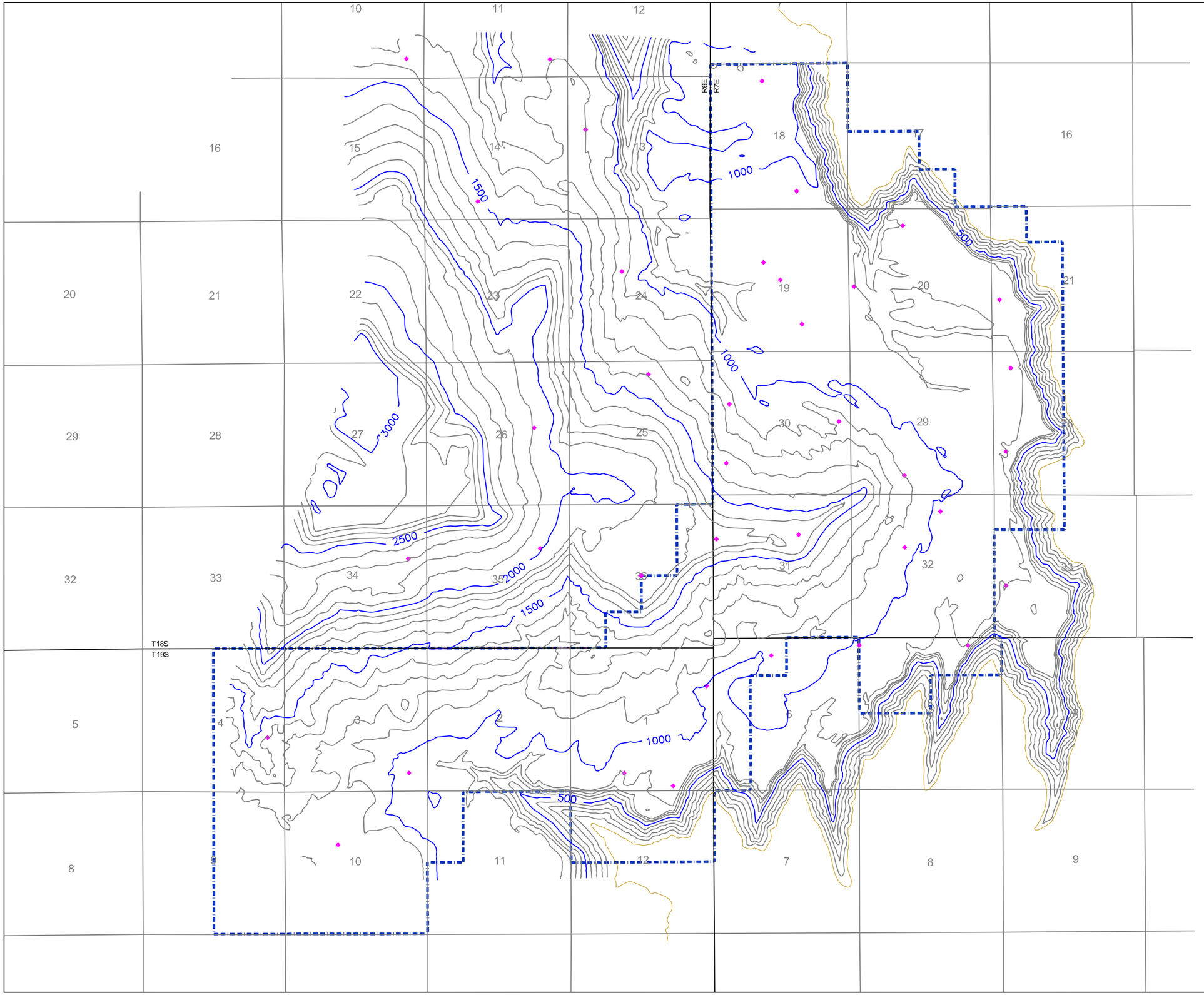
State of Utah
School and Institutional Trust Lands Administration

DATE: 3/5/2006

FIGURE 4.7

FILE: 3278-BCU

NORWEST CORPORATION



LEGEND

- SITLA NORTH HORN TRACT BOUNDARY
- DRILL HOLE
- LOWER BLIND CANYON OUTCROP
- OVERBURDEN

N

0 1000 2000 3000 4000 5000
FEET

SCALE: 1"=3500'

NORTH HORN SITLA TRACT

LOWER BLIND CANYON SEAM OVERBURDEN ISOPACH

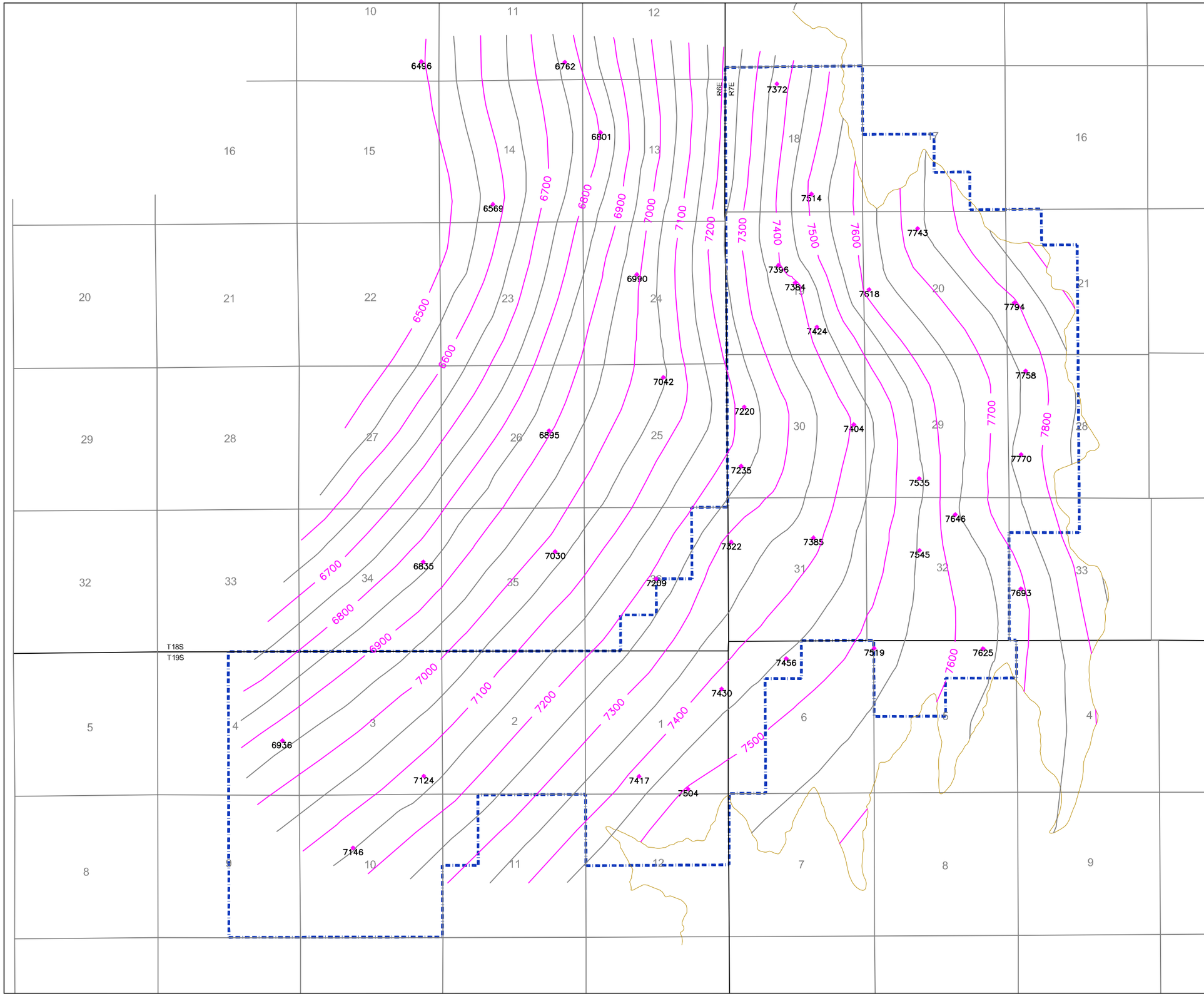
State of Utah
School and Institional Trust Lands Administration

DATE: 3/4/2006

FIGURE 5.1

FILE: 3278-BCL

NORWEST CORPORATION



LEGEND

- SITLA NORTH HORN TRACT BOUNDARY
- DRILL HOLE
- LOWER BLIND CANYON OUTCROP
- TOP STRUCTURE

N

0 1000 2000 3000 4000 5000
FEET

SCALE: 1"=3500'

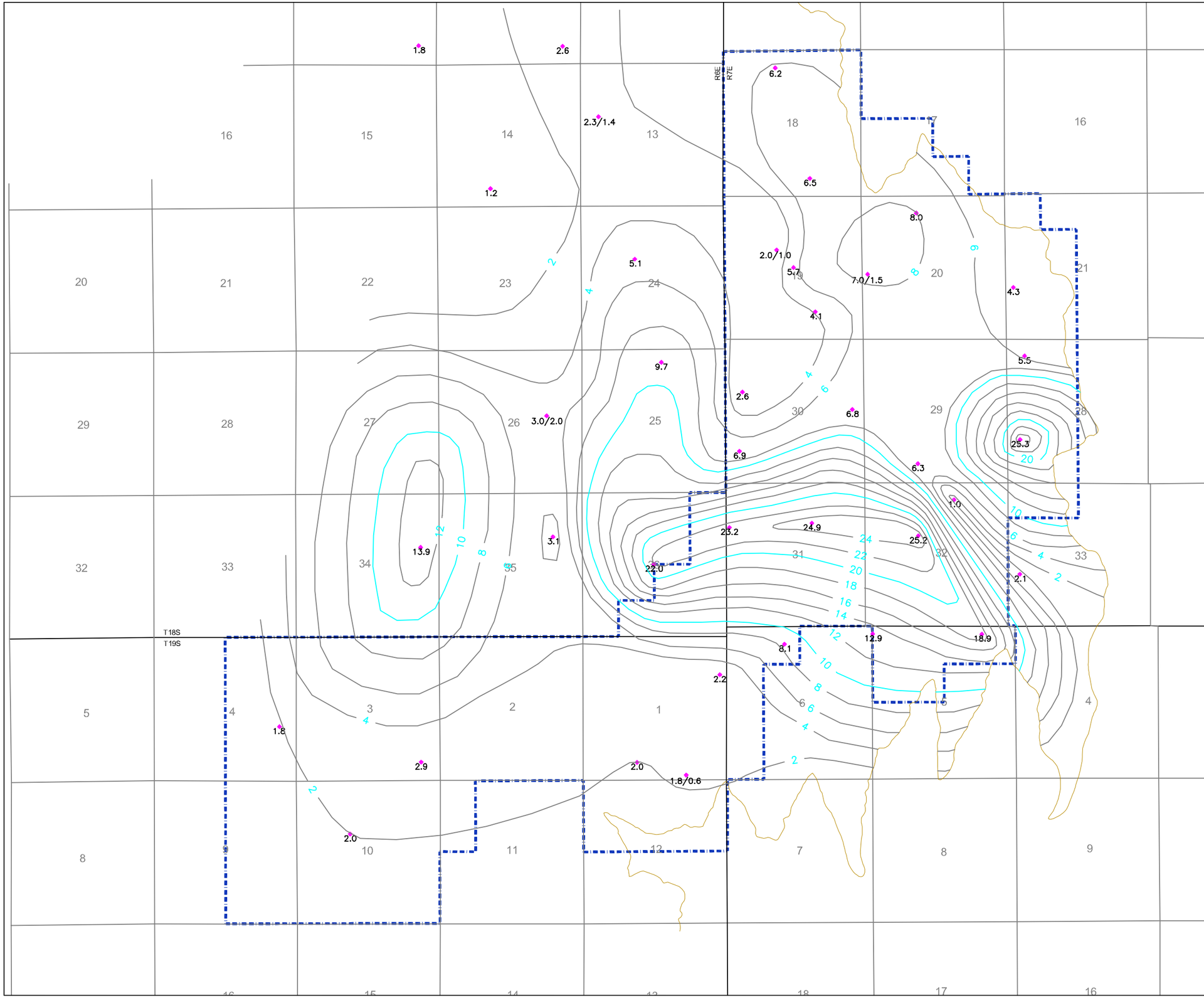
NORTH HORN SITLA TRACT

LOWER BLIND CANYON
SEAM TOP STRUCTURE

State of Utah
School and Institutional Trust Lands Administration

DATE: 3/4/2006
FIGURE 5.2
FILE: 3278-BCL

NORWEST CORPORATION



LEGEND

- SITLA NORTH HORN TRACT BOUNDARY
- DRILL HOLE
- 7.0/1.5 COAL/PARTING THICKNESS
- LOWER BLIND CANYON OUTCROP
- SEAM THICKNESS

N

0 1000 2000 3000 4000 5000
FEET

SCALE: 1"=3500'

NORTH HORN SITLA TRACT

LOWER BLIND CANYON SEAM ISOPACH

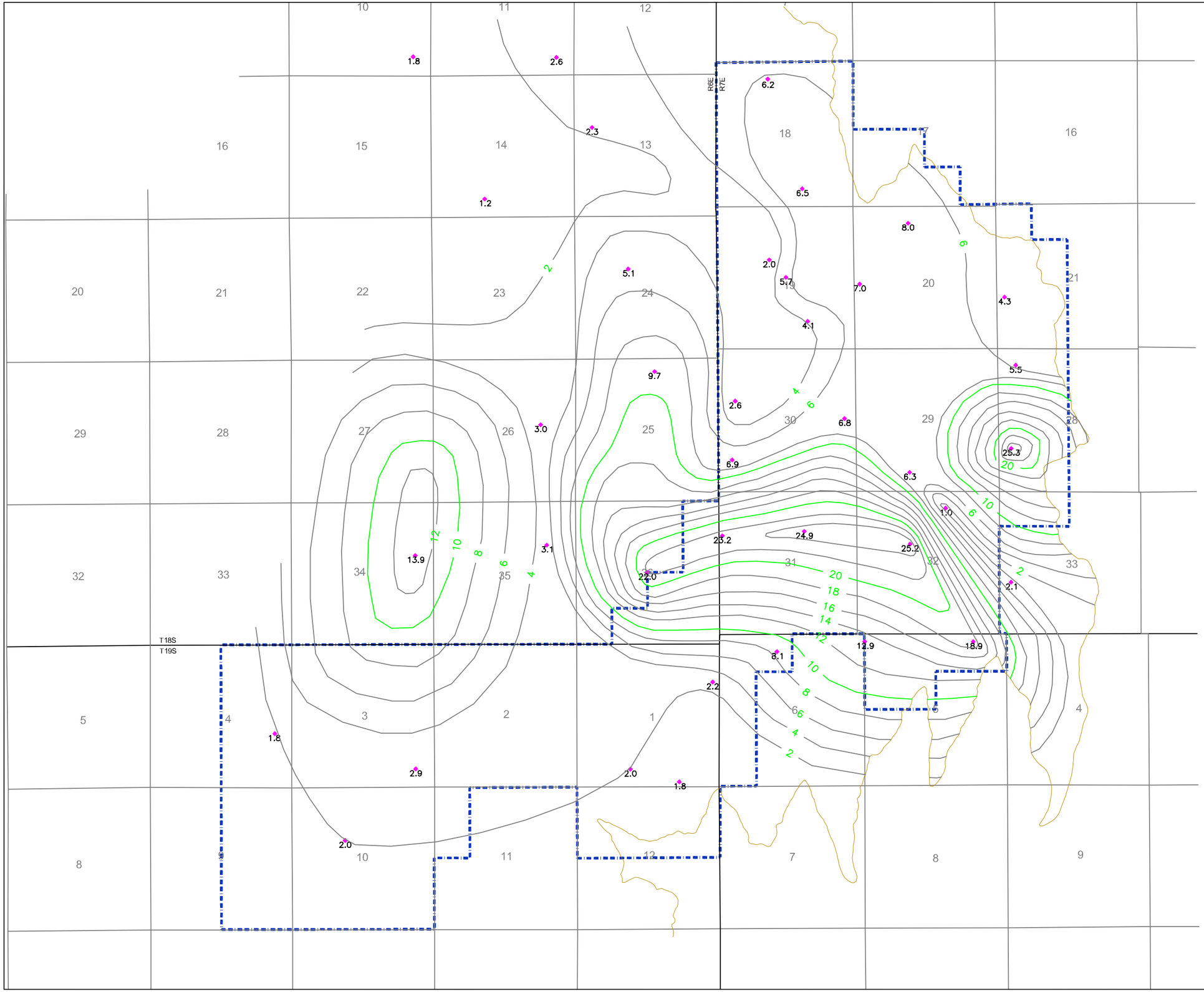
State of Utah
School and Institutional Trust Lands Administration

DATE: 3/4/2006

FIGURE 5.3

FILE: 3278-BCL

NORWEST CORPORATION



NORTH HORN SITLA TRACT

LOWER BLIND CANYON SEAM COAL ISOPACH

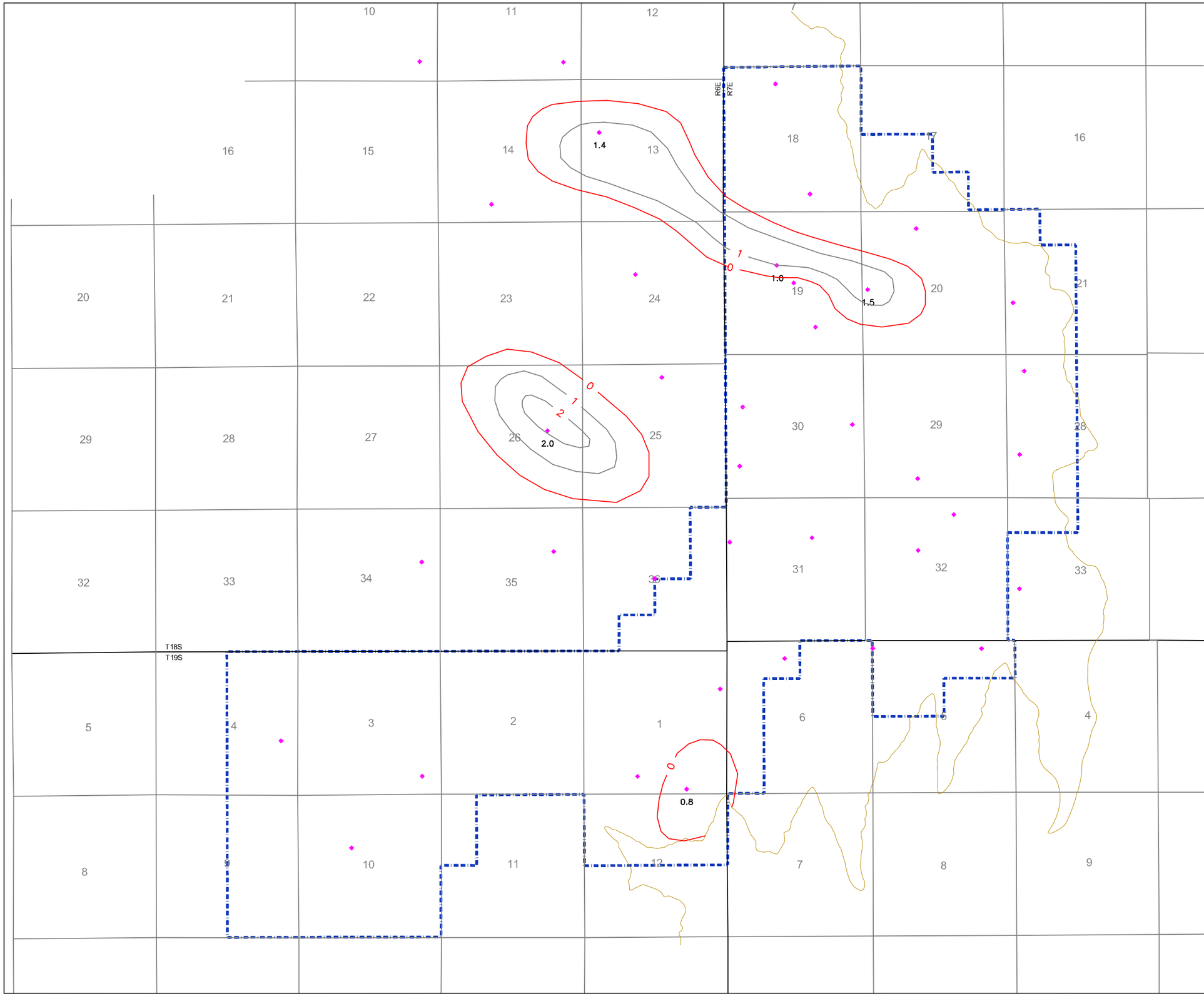
State of Utah
School and Institutional Trust Lands Administration

DATE: 3/4/2006

FIGURE 5.4

FILE: 3278-BCL

NORWEST CORPORATION



LEGEND

SITLA NORTH HORN TRACT BOUNDARY

DRILL HOLE

LOWER BLIND CANYON OUTCROP

PARTING THICKNESS

N

0 1000 2000 3000 4000 5000

FEET

SCALE: 1"=3500'

NORTH HORN SITLA TRACT

LOWER BLIND CANYON SEAM PARTING ISOPACH

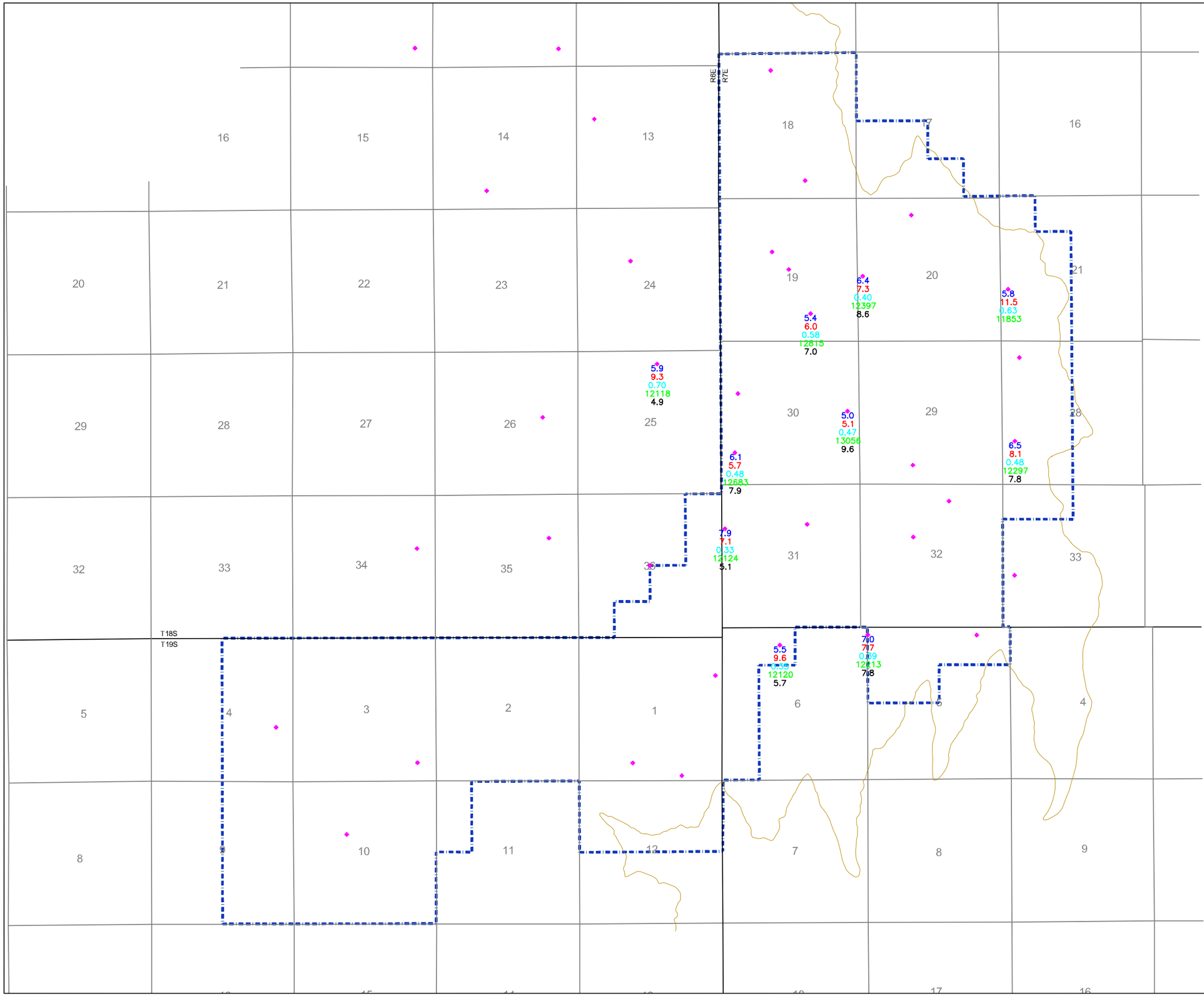
State of Utah
School and Institutional Trust Lands Administration

DATE: 3/4/2006

FIGURE 5.5

FILE: 3278-BCL

NORWEST CORPORATION



LEGEND

- SITLA NORTH HORN TRACT BOUNDARY
- DRILL HOLE
- LOWER BLIND CANYON OUTCROP

6.4 MOISTURE%
7.3 ASH%
0.4 SULFUR%
12397 BTU/LB
8.6 SODIUM%

N

0 1000 2000 3000 4000 5000
FEET

SCALE: 1"=3500'

NORTH HORN SITLA TRACT

LOWER BLIND CANYON SEAM
QUALITY DATA
(AS RECEIVED BASE)

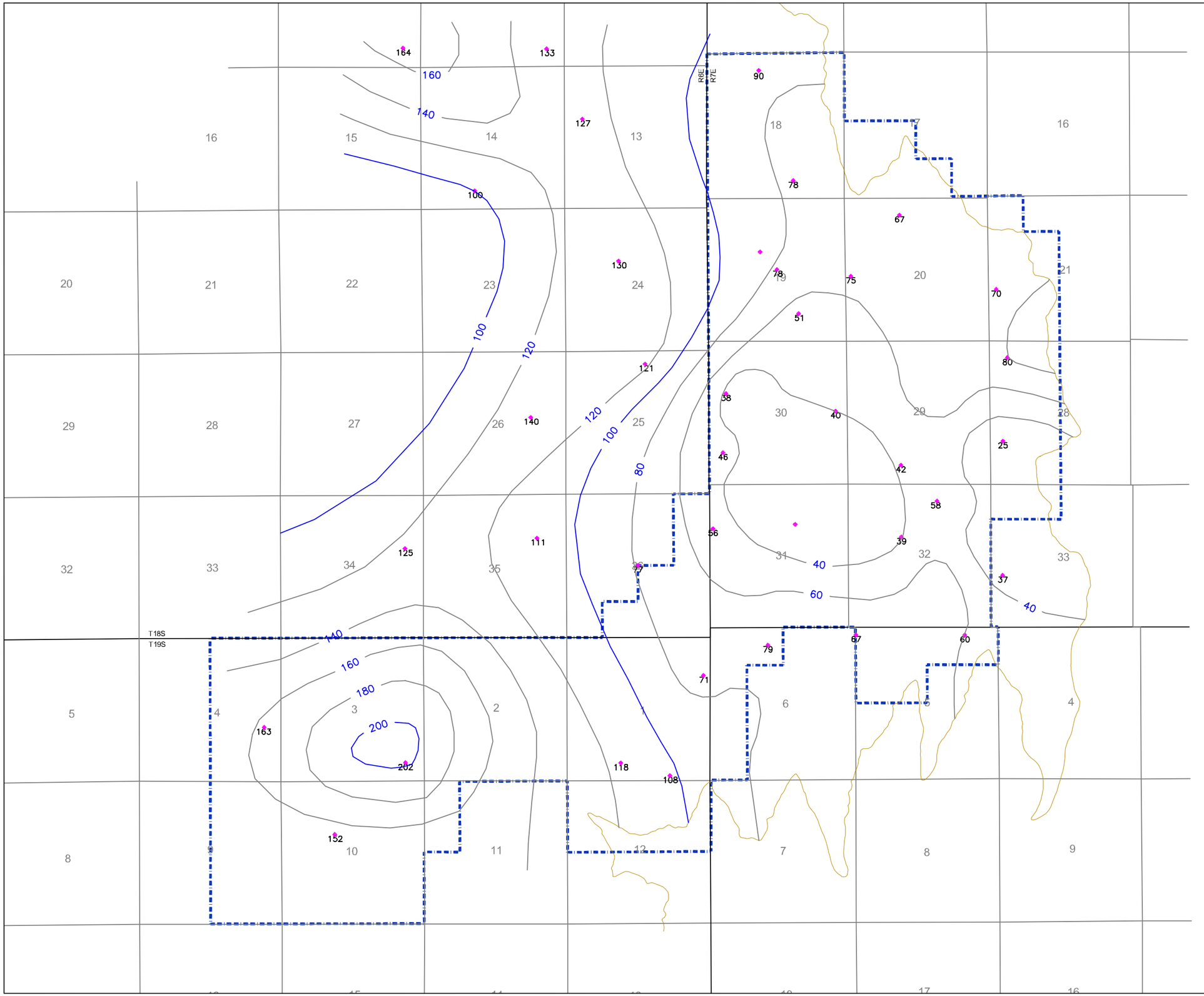
State of Utah
School and Institutional
Trust Lands Administration

DATE: 3/4/2006

FIGURE 5.6

FILE: 3278-BCL

NORWEST
CORPORATION



LEGEND

- SITLA NORTH HORN TRACT BOUNDARY
- DRILL HOLE
- LOWER BLIND CANYON OUTCROP
- INTERBURDEN

N

0 1000 2000 3000 4000 5000
FEET

SCALE: 1"=3500'

NORTH HORN SITLA TRACT

LOWER BLIND CANYON SEAM TO LOWER HIAWATHA SEAM INTERBURDEN ISOPACH

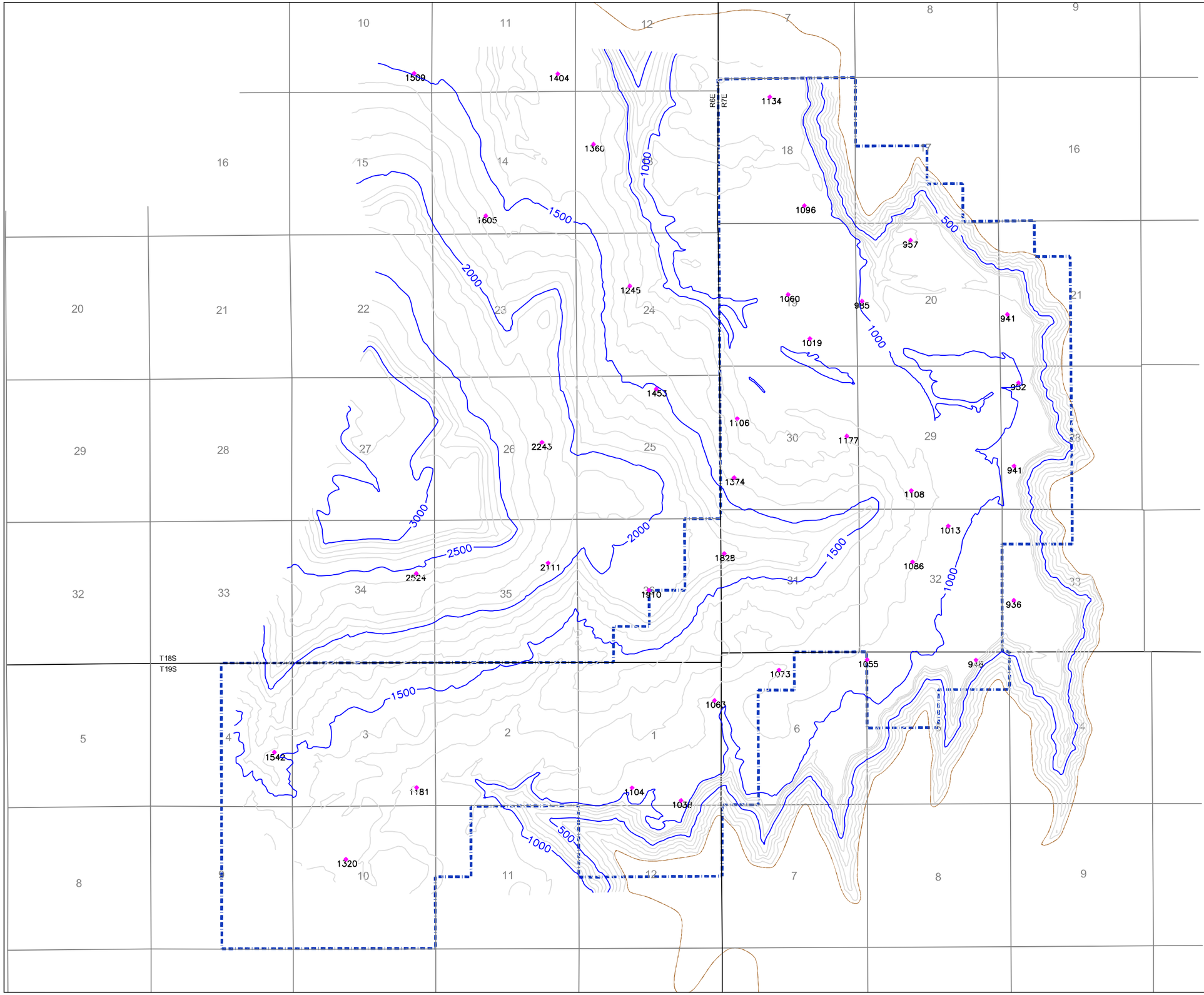
State of Utah
School and Institutional Trust Lands Administration

DATE: 3/4/2006

FIGURE 5.7

FILE: 3278-BCL

NORWEST CORPORATION



LEGEND

- SITLA NORTH HORN TRACT BOUNDARY
- DRILL HOLE
- LOWER HIAWATHA OUTCROP
- OVERBURDEN

N

0 1000 2000 3000 4000 5000
FEET

SCALE: 1"=3500'

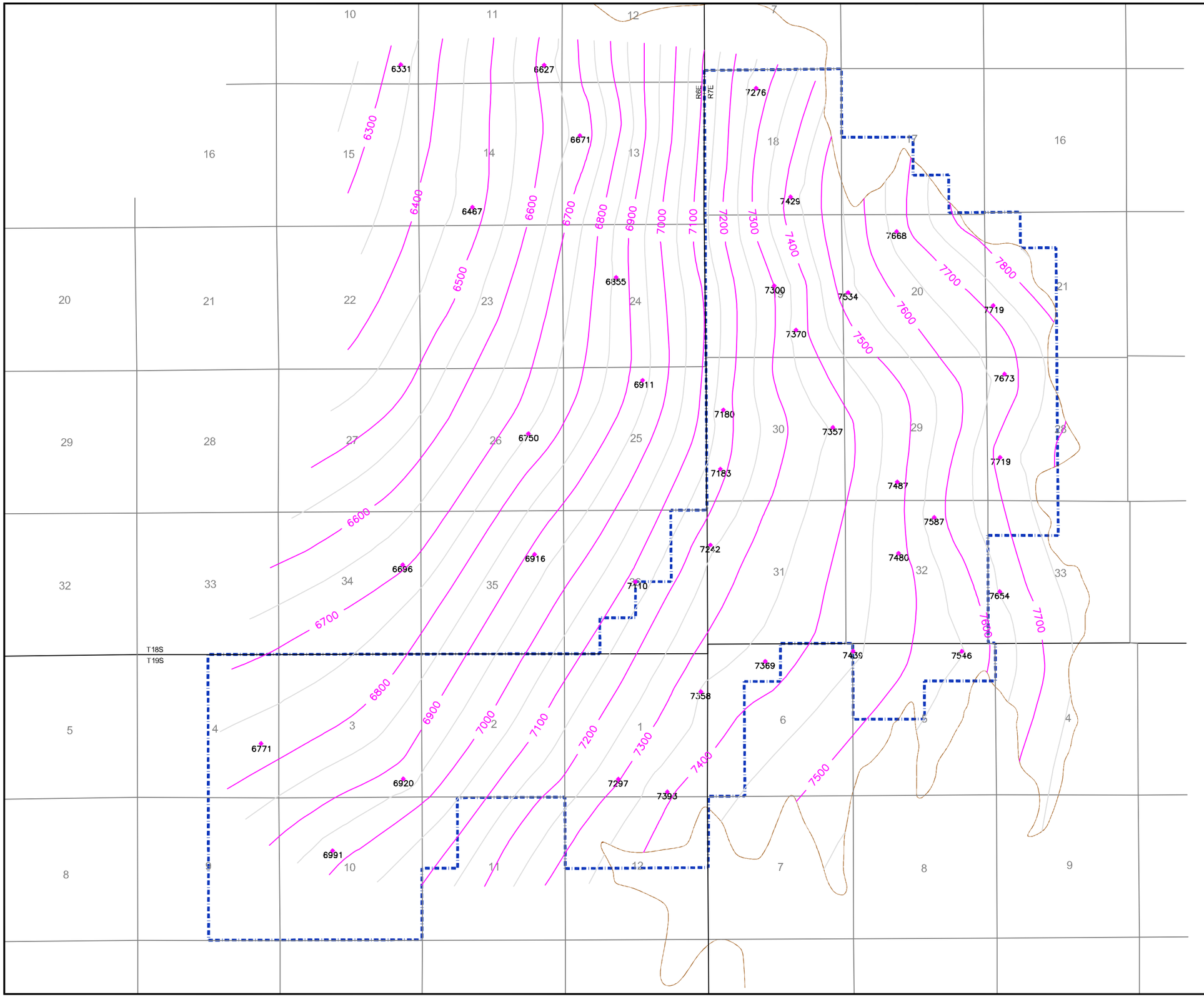
NORTH HORN SITLA TRACT

LOWER HIAWATHA SEAM
OVERBURDEN ISOPACH

State of Utah
School and Institutional Trust Lands Administration

DATE: 3/1/2006
FIGURE 6.1
FILE: 327B-HWL

NORWEST CORPORATION



LEGEND

- SITLA NORTH HORN TRACT BOUNDARY
- DRILL HOLE
- LOWER HIAWATHA OUTCROP
- STRUCTURE

N

0 1000 2000 3000 4000 5000
FEET

SCALE: 1"=3500'

NORTH HORN SITLA TRACT

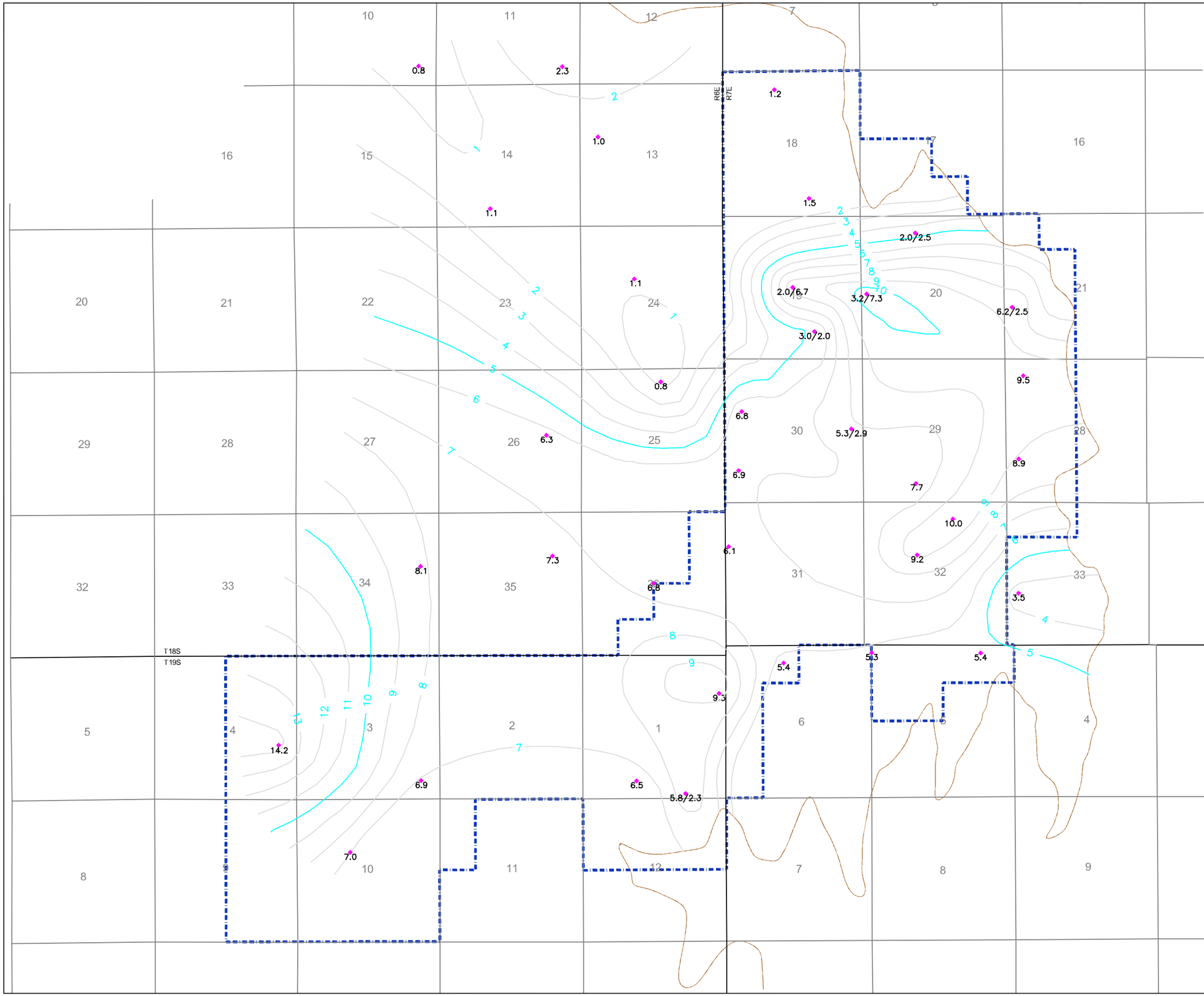
LOWER HIAWATHA SEAM
TOP STRUCTURE

State of Utah
School and Institutional Trust Lands Administration

DATE: 3/1/2006 | FIGURE 6.2

FILE: 3278-HWL

NORWEST CORPORATION



LEGEND

SITLA NORTH HORN TRACT BOUNDARY

DRILL HOLE

2.2/1.3 COAL/PARTING THICKNESS

LOWER HIAWATHA OUTCROP

SEAM ISOPACH

N

0 1000 2000 3000 4000 5000

FEET

SCALE: 1"=3500'

NORTH HORN SITLA TRACT

LOWER HIAWATHA SEAM ISOPACH

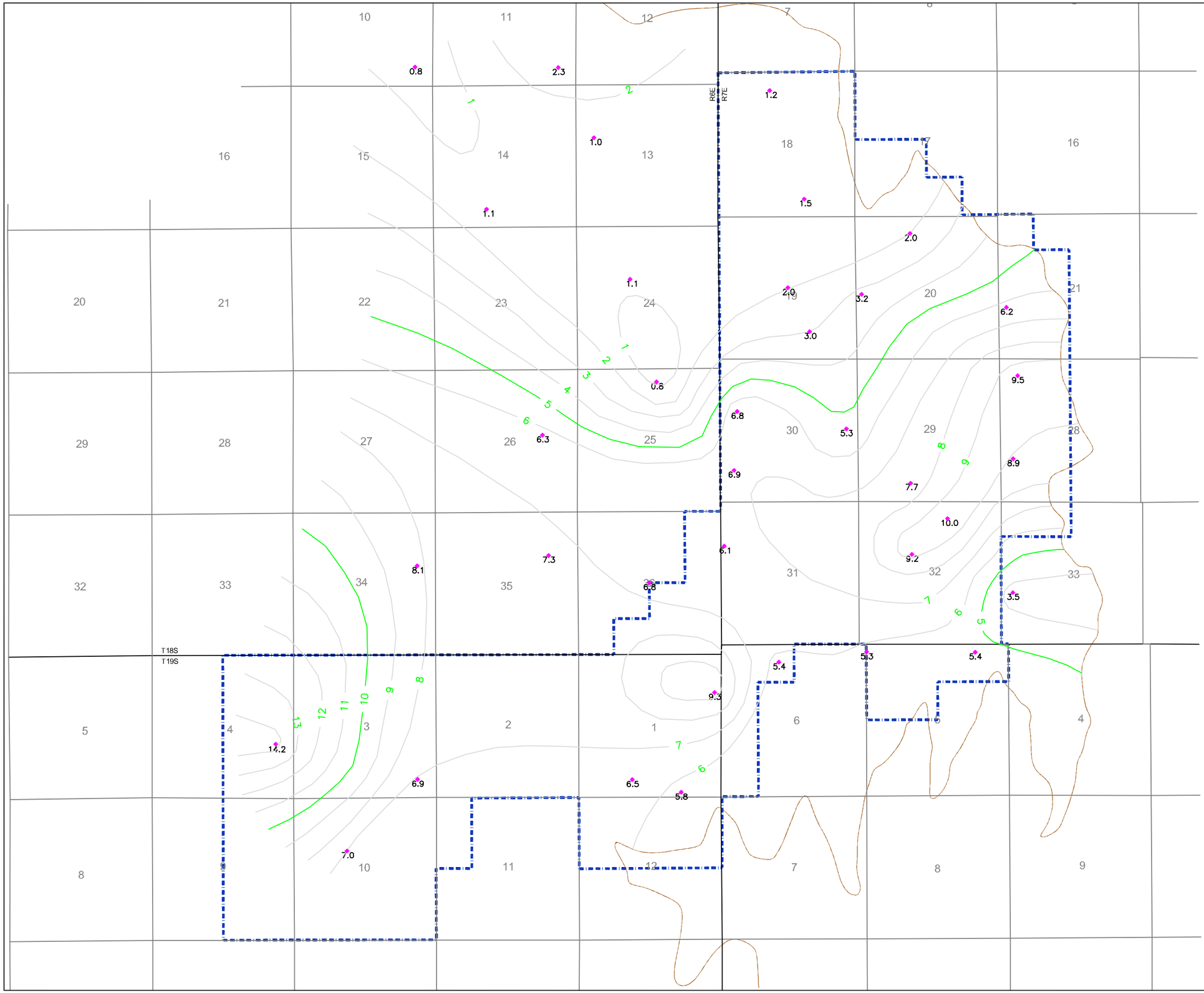
State of Utah
School and Institutional Trust Lands Administration

DATE: 3/1/2006

FIGURE 6.3

FILE: 3278-HWL

NORWEST CORPORATION



LEGEND

- SITLA NORTH HORN TRACT BOUNDARY
- DRILL HOLE
- LOWER HIAWATHA OUTCROP
- COAL ISOPACH

N

0 1000 2000 3000 4000 5000
FEET

SCALE: 1"=3500'

NORTH HORN SITLA TRACT

LOWER HIAWATHA SEAM
COAL ISOPACH

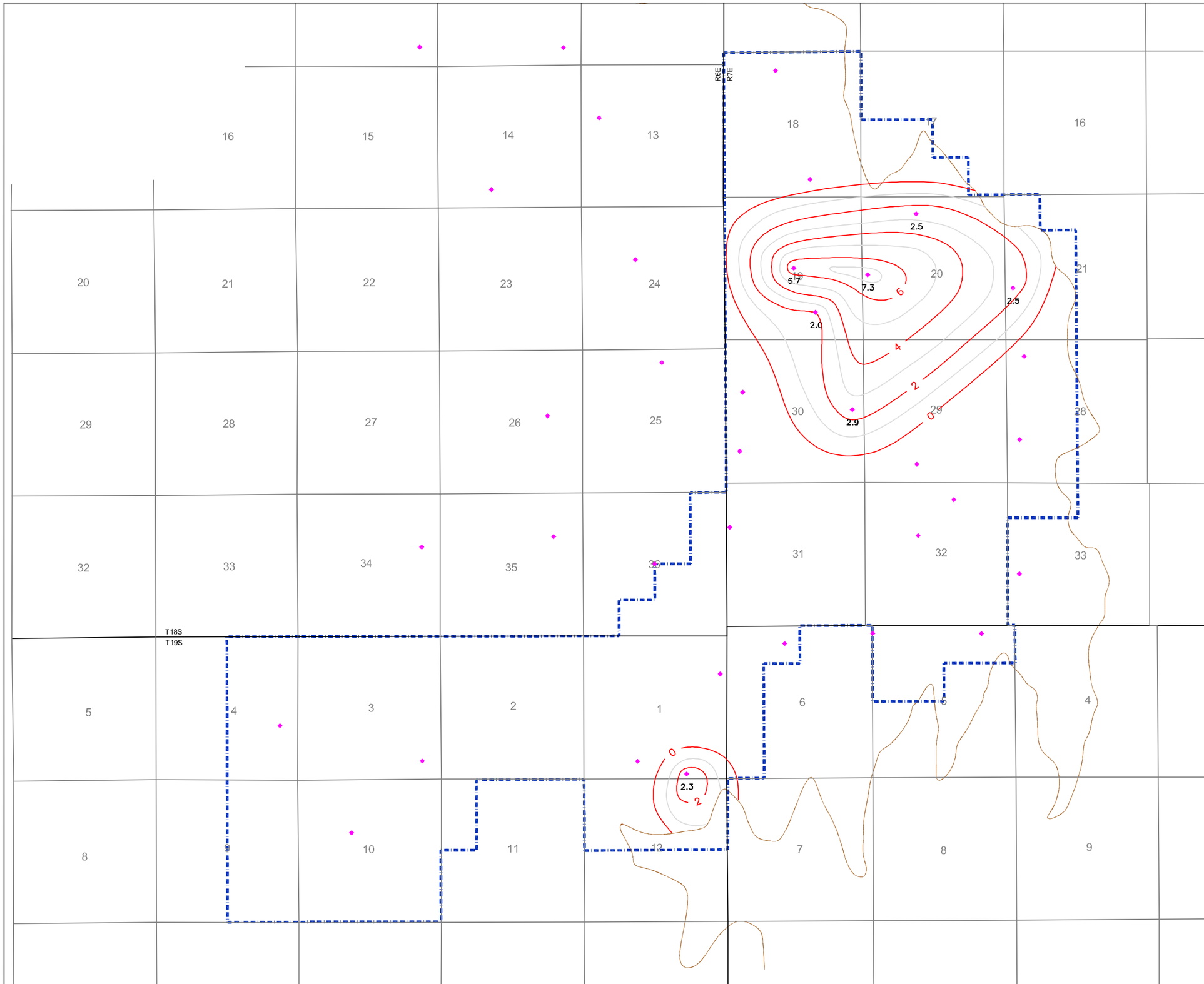
State of Utah
School and Institional Trust Lands Administration

DATE: 3/1/2006

FIGURE 6.4

FILE: 3278-HWL

NORWEST CORPORATION



LEGEND

- SITLA NORTH HORN TRACT BOUNDARY
- DRILL HOLE
- LOWER HIAWATHA OUTCROP
- PARTING ISOPACH

N

0 1000 2000 3000 4000 5000
FEET

SCALE: 1"=3500'

NORTH HORN SITLA TRACT

LOWER HIAWATHA SEAM
PARTING ISOPACH

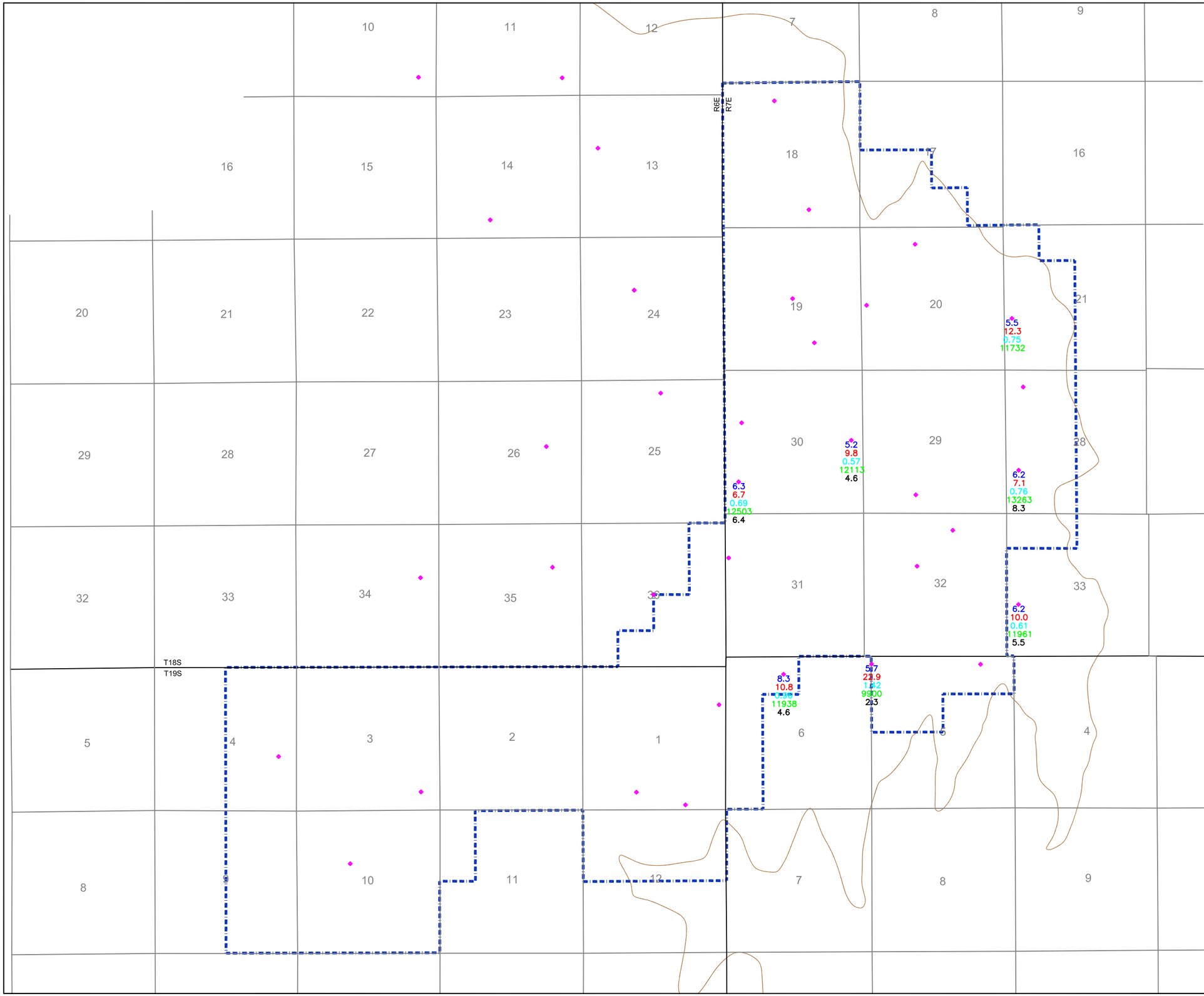
State of Utah
School and Institutional Trust Lands Administration

DATE: 3/1/2006

FIGURE 6.5

FILE: 3278-HWL

NORWEST CORPORATION



LEGEND

- SITLA NORTH HORN TRACT BOUNDARY
- DRILL HOLE
- LOWER HIAWATHA OUTCROP

5.2 MOISTURE%
9.8 ASH%
0.57 SULFUR%
12113 BTU/LB
4.6 SODIUM%

N

0 1000 2000 3000 4000 5000
FEET

SCALE: 1"=3500'

NORTH HORN SITLA TRACT

LOWER HIAWATHA SEAM QUALITY DATA

State of Utah
School and Institutional Trust Lands Administration

DATE: 2/27/2006

FIGURE 6.6

FILE: 3278-HWL

NORWEST CORPORATION