ORIGINAL

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FIELD NOTES

OF THE

DEPENDENT RESURVEY OF A PORTION OF THE HOPI-NAVAJO PARTITION LINE, SEGMENT "D"

AND

THE SURVEY OF

A PORTION OF THE SOUTH BOUNDARY

AND

A PORTION OF THE SUBDIVISIONAL LINES,

TOWNSHIP 35 NORTH, RANGE 19 EAST,

OF THE GILA AND SALT RIVER MERIDIAN,

IN THE STATE OF ARIZONA.

EXECUTED BY

Craig S. Dukart, Cadastral Surveyor

Under Special Instructions dated July 13, 2007, approved July 13, 2007, which provided for the surveys included under Group No. 1026, and assignment instructions dated July 13, 2007.

Survey commenced July 19, 2007

Survey completed August 23, 2007

INDEX DIAGRAM

TOWNSHIP 35 NORTH RANGE 19 EAST GILA AND SALT RIVER MERIDIAN, ARIZONA

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Dependent resurvey of a portion of the Hopi-Navajo Partition Line, Segment "D", Pages 4-8

T. 35 N., R. 19 E., Gila and Salt River Meridian, Arizona

CHAINS

The following field notes describe the dependent resurvey of a portion of the Hopi-Navajo Partition Line, Segment "D", and the survey of a portion of the South boundary and a portion of the subdivisional lines, Township 35 North, Range 19 East, Gila and Salt River Meridian, Arizona.

The history of surveys pertaining to this survey is as follows:

The Partition Line between the Hopi tribe and the Navajo tribe, Segment "D", was surveyed by Kenneth A. Krenke, Harry S. Pierce, Shirley B. Hjellum and Jerry L. Wahl, Supervisory Cadastral Surveyors, from 1977 to 1981.

The South (a portion of the Eighth Standard Parallel North), East, West and North boundaries, and the subdivisional lines of Township 33 North, Range 19 East, Gila and Salt River Meridian, were surveyed by Jones Curtiss, Cadastral Surveyor, in 2001.

The survey of the South boundary, portions of the East and West boundaries, and a portion of the subdivisional lines of Township 35 North, Range 18 East, Gila and Salt River Meridian, were surveyed by Craig S. Dukart, Cadastral Surveyor, in 2007.

The survey was executed in accordance with the specifications as set forth in the $\underline{\text{Manual of Instructions for the Survey of the}}$ $\underline{\text{Public Lands of the United States, 1973}}$, and the Special Instructions dated July 13, 2007, for Group No. 1026, Arizona.

The true meridian direction and length of all lines were determined by real time kinematic global positioning system observations using Trimble Navigation 5800 model receivers.

Geodetic control was derived from Global Positioning System (GPS) static observations post processed by National Geodetic Survey, Online Positioning User Service (OPUS), utilizing Continuously Operating Reference Stations (CORS) FST1 FLAGSTAFF 1 CORS ARP, P011 SPIDERROCKAZ2005 CORS ARP and P028 CHACOCNHP_NM2005 CORS ARP. The geographic position of the southwest corner of the township is as follows:

Latitude: 36°23'22.54" N. Longitude: 110°20'47.71" W.

The mean magnetic declination is $11 \ 1/4^{\circ}$ E.

Dependent Resurvey of a Portion of the Hopi-Navajo Partition Line, Segment "D",

T. 35 N., R. 19 E., Gila and Salt River Meridian, Arizona

CHAINS

Restoring a portion of the survey executed by Kenneth A. Krenke, Harry S. Pierce, Shirley B. Hjellum and Jerry L. Wahl, in 1977-1981

Beginning at AP D-132, monumented with an iron post, 2 1/2 ins. diam., firmly set, projecting 4 ins. above the ground, in a collar of cement, 1 ft. diam., with a brass cap mkd. HOPI NAVAJO APD-132 1979, from which an orig. bearing tree

A juniper, 22 ins. diam., bears N. 21° E., 40 lks. dist., with scribe marks APD 132 NIR BT visible on an open blaze.

and from which a new bearing tree

A juniper, 10 ins. diam., bears S. 89 $1/4^{\circ}$ W., 56 lks. dist., mkd. APD 132 HIR BT.

Add the marks 2007 to the brass cap.

Cor. falls approximately 1.5 lks., northeasterly, of a corner of a barbed wire fence, 5 strand, bears S. 39° W. and N. 15° W.

N. 14°46' W., on line D-132 - D-133.

35.98

AP D-133, monumented with an iron post, 2 1/2 ins. diam., firmly set, projecting 3 ins. above the ground, in a collar of concrete, 1.5 ft. diam., with a brass cap mkd. APD-133 HOPI NAVAJO 1979, from which an orig. bearing tree

A forked juniper, 9 ins. diam., bears N. 87 1/4° W., 74 lks. dist., with scribe marks APD 133 HIR BT visible on an open blaze. (Record: S. 89° W.)

and from which a new bearing tree

A piñon, 10 ins. diam., bears S. 42° E., 80 lks. dist., mkd. APD 133 NIR BT.

A steel fence post is set alongside the iron post.

Add the marks 2007 to the brass cap.

Cor. falls approximately 1 lk. northerly of a corner of a barbed wire fence, 5 strand, bears N. 27° E. and S. 15° E.

N. 27°17' E., on line D-133 - D-134.

39.99

AP D-134, monumented with an iron post, 2 1/2 ins. diam., firmly set, projecting 2 ins. above the ground, with a brass cap mkd. APD-134 HOPI NAVAJO 1979, from which new bearing trees

Dependent Resurvey of a Portion of the Hopi-Navajo Partition Line, Segment "D",

T. 35 N., R. 19 E., Gila and Salt River Meridian, Arizona

CHA]	INS
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- A juniper, 12 ins. diam., bears S. 14 1/4° E., 1.04 chs. dist., mkd. APD-134 NIR BT.
- A piñon, 9 ins. diam., bears N. 52 $3/4^{\circ}$ W., 1.19 chs. dist., mkd. APD-134 HIR BT.

A steel fence post is set alongside the iron post.

Add the marks 2007 to the brass cap.

Cor. falls in a barbed wire fence, 5 strand, bears N. 27° E. and S. 27° W.

N. 27°16' E., on line D-134 - D-135.

40.01

AP D-135, monumented with an iron post, 2 1/2 ins. diam., firmly set, projecting 3 ins. above the ground, with a brass cap mkd. APD-135 HOPI NAVAJO 1979, from which the orig. bearing trees

- A piñon, 10 ins. diam., bears S. 73 1/2° E., 59 lks. dist., with scribe marks APD 135 NIR BT visible on a partially healed blaze.
- A juniper, 24 ins. diam., bears S. 89 3/4° W., 99 lks. dist., with scribe marks APD 135 HIR BT on a partially healed blaze. (Record: 98 lks.)

A steel fence post is set alongside the iron post.

Add the marks 2007 to the brass cap.

Cor. falls in a barbed wire fence, 5 strand, bears N. 27° E. and S. 27° W.

N. 27°16' E., on line D-135 - D-136.

40.00

AP D-136, monumented with an iron post, 2 1/2 ins. diam., firmly set, projecting 2 ins. above the ground, with a brass cap mkd. APD-136 HOPI NAVAJO 1979, from which the orig. bearing trees

- A juniper, 15 ins. diam., bears N. 74° E., 98 lks. dist., with scribe marks APD 136 NIR BT visible on an open blaze.
- A juniper, 20 ins. diam., bears N. 57 $1/4^{\circ}$ W., 36 lks. dist., with scribe marks APD 136 HIR BT on an open blaze.

and a bearing tree not of record

Dependent Resurvey of a Portion of the Hopi-Navajo Partition Line, Segment "D",

	Hopi-Navajo Partition Line, Segment "D", T. 35 N., R. 19 E., Gila and Salt River Meridian, Arizona
CHAINS	
	A juniper, 15 ins. diam., bears N. 56 1/2° E., 62 lks. dist., with scribe marks APD 136 NIR BT visible on an open blaze.
	A steel fence post is set alongside the iron post.
	Add the marks 2007 to the brass cap.
	Cor. falls alongside a barbed wire fence, 5 strand, bears N. 27° E. and S. 27° W.
	N. 27°17' E., on line D-136 - D-137.
39.99	AP D-137, monumented with an iron post, 2 1/2 ins. diam., firmly set, projecting 4 ins. above the ground, with a brass cap mkd. APD-137 HOPI NAVAJO 1979, from which an orig. bearing tree
	A juniper, 9 ins. diam., bears S. 52° E., 47 lks. dist., with scribe marks APD 137 NIR BT visible on an open blaze. (Record: S. 53° E., 48 lks.)
	and from which a new bearing tree
	A piñon, 7 ins. diam., bears S. 77 1/4° W., 49.5 lks. dist., mkd. APD 137 HIR BT.
	Add the marks 2007 to the brass cap.
	Cor. falls in a barbed wire fence, 5 strand, bears N. 27° E. and S. 27° W.
	N. 27°16' E., on line D-137 - D-138.
29.38	AP D-138, monumented with an iron post, 2 1/2 ins. diam., firmly set, flush with the ground, with a brass cap mkd. HOPI NAVAJO AP D-138 1979, from which the orig. bearing tree
·	A piñon, 15 ins. diam., bears S. 80° W., 1.01 chs. dist., with scribe marks APD 138 HIR BT visible on an open blaze. (Record: S. 78° W., 100 lks.)
	Add the marks 2007 to the brass cap.
	Cor. falls approximately 1.5 lks., northeasterly of a barbed wire fence, 5 strand, bears S. 27° W. and N. 57° W.

From this cor. point, control cor. JMR 10594, bears N. $35^{\circ}04^{\circ}$ W., 35.88 chs. dist., monumented with an iron post, 2 1/2 ins. diam., firmly set, projecting 6 ins. above the ground, with a brass cap mkd. JMR 10594 HOPI-NAVAJO 1979.

3.

Dependent Resurvey of a Portion of the Hopi-Navajo Partition Line, Segment "D",

T. 35 N., R. 19 E., Gila and Salt River Meridian, Arizona

	T. 35 N., R. 19 E., Gila and Salt River Meridian, Arizona
CHAINS	
	N. 57°20' W., on line D-138 - D-139.
39.99	AP D-139, monumented with an iron post, 2 1/2 ins. diam., firmly set, projecting 5 ins. above the ground, with a brass cap mkd. APD-139 NAVAJO HOPI 1979, from which the orig. bearing trees
	A juniper, 17 ins. diam., bears S. 70 1/4° W., 1.095 chs. dist., with scribe marks APD 139 HIR BT visible on an open blaze. (Record: S. 72° W.)
	A juniper, 15 ins. diam., bears N. 23° W., 1.23 chs. dist., with scribe marks APD 139 NIR BT visible on a partially healed blaze. (Record: N. 24° W.)
	Add the marks 2007 to the brass cap.
	Cor. falls in a barbed wire fence, 5 strand, bears S. 57° E. and N. 57° W.
	N. 57°19' W., on line D-139 - D-140.
16.05	AP D-140, monumented with an iron post, 2 1/2 ins. diam., firmly set, projecting 8 ins. above the ground, with a brass cap mkd. APD 140 NAVAJO HOPI 1979, from which the orig. bearing trees
	A juniper, 20 ins. diam., bears N. 49 1/4° E., 70.5 lks. dist., with illegible scribe marks visible on a mostly healed blaze. (Record: N. 51° E.)
	A juniper, 14 ins. diam., bears S. 18 1/2° E., 1.225 chs. dist., with scribe marks APD 140 HIR BT visible on a partially healed blaze. (Record: S. 16° E.)
	A steel fence post is set alongside the iron post.
	Add the marks 2007 to the brass cap.
	Cor. falls approximately 1 lk. northwesterly of a corner of a barbed wire fence, 5 strand, bears S. 55° E. and S. 83° W.
	S. 83°21' W., on line D-140 - D-141.
40.01	AP D-141, monumented with an iron post, 2 1/2 ins. diam., firmly set, projecting 5 ins. above the ground, in a cement collar, 18 ins. diam., with a brass cap mkd. APD-141 NAVAJO HOPI 1979, from which the orig. bearing trees
	A juniper, 19 ins. diam., bears S. 9° W., 47 lks. dist., with scribe marks APD 141 NIR BT visible on a partially healed blaze. (Record: S. 11° W., 46.5 lks.)

Dependent Resurvey of a Portion of the Hopi-Navajo Partition Line, Segment "D",

CITT TITC	T. 35 N., R. 19 E., Gila and Salt River Meridian, Arizona
CHAINS	
	A piñon, 14 ins. diam., bears N. 11 1/4° W., 92 lks dist., with scribe marks APD 141 HIR BT visible on partially healed blaze. (Record: N. 5° W., 93 lks.)
	A steel fence post is set alongside the iron post.
	Add the marks 2007 to the brass cap.
	Cor. falls in a barbed wire fence, 5 strand, bears N. 83° E. and S. 83° W.
	S. 83°20' W., on line D-141 - D-142.
40.00	AP D-142, monumented with an iron post, 2 1/2 ins. diam., firmleset, projecting 3 ins. above the ground, in a collar concrete, 12 ins. diam., with a brass cap mkd. APD-142 NAVACHOPI 1979, from which new bearing trees
	A juniper, 15 ins. diam., bears S. 12 1/2° E., 83 lks dist., mkd. APD 142 HIR BT.
	A piñon, 13 ins. diam., bears N. 81° W., 1.33 chs. dist mkd. APD 142 NIR BT.
	Add the marks 2007 to the brass cap.
	Cor. falls in a barbed wire fence, 5 strand, bears N. 83° E. an S. 83° W.
	S. 83°21' W., on line D-142 - D-143.
40.00	AP D-143, monumented with an iron post, 2 1/2 ins. diam., firm set, projecting 6 ins. above the ground, with a brass cap mkd APD-143 NAVAJO HOPI 1979 2007, from which the orig. bearing trees
	A juniper, 14 ins. diam., bears S. 41° E., 85 lks. dist with scribe marks APD 143 HIR BT visible on an ope blaze.
	A juniper, 10 ins. diam., bears N. 4 1/4° W., 62 lkg dist., with scribe marks APD 143 NIR BT visible on a open blaze. (1979 Record: N. 18° W., 59 lks.)
	Cor. falls in a barbed wire fence, 5 strand, bears N. 83° E. an S. 83° W.

Survey of a Portion of the South Boundary, T. 35 N., R. 19 E., Gila and Salt River Meridian, Arizona

CHAINS	
	Beginning at the cor. of Tps. 34 and 35 N., Rs. 18 and 19 E., monumented with a stainless steel post, 2 1/2 ins. diam., firmly set, projecting 2 ins. above the ground, with a brass cap mkd. T35N R18E R19E S36 S31 S1 S6 T34N 2007, from which the orig. bearing trees
	1

- A piñon, 8 ins. diam., bears N. 35 $1/4^{\circ}$ E., 3.28 chs. dist., with scribe marks T35N R19E S31 BT visible on an open blaze.
- A piñon, 6 ins. diam., bears S. 60 $1/4^{\circ}$ E., 60 lks. dist., with scribe marks T34N R19E S6 BT visible on an open blaze.
- A piñon, 6 ins. diam., bears S. 58 3/4° W., 2.50 chs. dist., with scribe marks X BT visible on an open blaze.
- A juniper, 12 ins. diam., bears N. 63 $1/4^{\circ}$ W., 2.09 chs. dist., with scribe marks T35N R18E S36 BT visible on an open blaze.

An accessory mound of stone, 3 ft. base, 2 1/2 ft. high, is located S. of cor.

East, bet. secs. 6 and 31.

Over rolling and broken land.

38.80 Utility Lines, 4 wire, bears S. 44° E. and N. 44° W.

38.95 Point for the 1/4 sec. cor. of secs. 6 and 31.

Set an alum. post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with alum. cap mkd.

2007

from which

- A juniper, 18 ins. diam., bears N. 51 1/4° E., 1.20 chs. dist., mkd. 1/4 S31 BT.
- A juniper, 8 ins. diam., bears S. 12 1/2° E., 1.15 chs. dist., mkd. 1/4 S6 BT.

Raise a mound of stone, 3 ft. base, 2 1/2 ft. high, N. of cor.

Survey of a Portion of the South Boundary, T. 35 N., R. 19 E., Gila and Salt River Meridian, Arizona

CHAINS

Deposit a magnet, in a white plastic case, at the base of the alum. post.

From this cor. point, Cor. No. 10, Tract No. 2, of the Navajo and Hopi Joint Mineral Ownership Lease $14-20-0450-5743\,(H)/14-20-0603-9910\,(N)$, bears N. $71^{\circ}22^{\circ}$ E., 1.264 chs. dist., monumented with an iron post, 3 ins. diam., firmly set, projecting 20 ins. above the ground, with iron top plate mkd. PEABODY COAL CO. COR. #10 TRACT #2 E.O.

77.25

Dirt road, 10 ft. wide, bears N. 60° E. and S. 70° W.

78.95

Point for the cor. of secs. 5, 6, 31 and 32.

Set an alum. post, 28 ins. long, 2 1/2 ins. diam., 23 ins. in the ground, with alum. cap mkd.

2007

from which

- A piñon, 7 ins. diam., bears N. 43 1/4° E., 71 lks. dist., mkd. T35N R19E S32 BT.
- A juniper, 8 ins. diam., bears S. 55 3/4° E., 29 lks. dist., mkd. T34N R19E S5 BT.
- A juniper, 8 ins. diam., bears S. 66 3/4° W., 48.5 lks. dist., mkd. T34N R19E S6 BT.
- A piñon, 3 ins. diam., bears N. 60 1/2° W., 72.5 lks. dist., mkd. X BT.

Raise a mound of stone, 3 ft. base, 3 ft. high, W. of cor.

Deposit a magnet, in a white plastic case, at the base of the stainless steel post.

Land, rolling and broken.

Soil, rocky.

Timber, piñon and juniper; undergrowth, sparse sage brush, and mormon tea.

East, bet. secs. 5 and 32.

Over rolling and broken land.

Survey of a Portion of the South Boundary, T. 35 N., R. 19 E., Gila and Salt River Meridian, Arizona

	T. 35 N., R. 19 E., Gila and Salt River Meridian, Arizona
CHAINS	
40.00	Point for the 1/4 sec. cor. of secs. 5 and 32.
	Set an alum. post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with alum. cap mkd.
	T 35 N R 19 E S 32 1/4 —— S 5
	T 34 N
	2007
	from which
	A juniper, 13 ins. diam., bears S. 44 3/4° W., 1.935 chs. dist., mkd. 1/4 S5 BT.
	Raise a mound of stone, 3 ft. base, 3 1/2 ft. high, N. of cor.
	Deposit a magnet, in a white plastic case, at the base of the stainless steel post.
42.33	Point for the closing cor. of secs. 5 and 32, at intersection with the Hopi-Navajo Partition Line, Segment "D".
	Set an alum. post, 28 ins. long, 2 1/2 ins. diam., 27 ins. in the ground, with alum. cap mkd.
	T 35 N R 19 E
	H CS32 NA
	O V P C S 5 A
	I O
	т 34 м
	2007
	Raise a mound of stone, 3 ft. base, 3 1/2 ft. high, W. of cor.
	Deposit a magnet, in a white plastic case, at the base of the stainless steel post.
	Cor. falls in a barbed wire fence, 5 strand, bears S. 15° E. and N. 15° W.
	Cor. falls 68 lks. W. of a graded road, 25 ft. wide, bears S. 20° E. and N. 20° W.

Survey of a Portion of the South Boundary, T. 35 N., R. 19 E., Gila and Salt River Meridian, Arizona

CHAINS

From this cor. point, AP D-132, Hopi-Navajo Partition Line, Segment "D", bears S. 14°46' E., 17.64 chs. dist., hereinbefore described.

From this same cor. point, AP D-133, Hopi-Navajo Partition Line, Segment "D", bears N. $14^{\circ}46'$ W., 18.34 chs. dist., hereinbefore described.

From this same cor. point, the calculated position for the cor. of secs. 4, 5, 32 and 33, determined 320.00 chs. from the cor. of Tps. 34 and 35 N., Rs. 19 and 20 E., hereinafter described, on the S. bdy. of the Tp., bears East, 37.67 chs. dist., not monumented.

From this same cor. point, the point for the cor. of Tps. 34 and 35 N., Rs. 19 and 20 E., established at 6 miles (480 chs.) N. of the cor. of Tps. 33 and 34 N., Rs. 19 and 20 E., monumented with a stainless steel post, 2 1/2 ins. diam., firmly set, projecting 3 ins. above the ground, with brass cap mkd. T34N R19E R20E S36 S31 S1 S6 T33N 2001, add the marks 2007 to the brass cap, bears East, 357.67 chs. dist.

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.

2007

from which

- A piñon, 5 ins. diam., bears N. 53° E., 37 lks. dist., mkd. X BT.
- A piñon, 4 ins. diam., bears S. 30 $3/4^{\circ}$ E., 73 lks. dist., mkd. X BT.
- A piñon, 8 ins. diam., bears S. 38 3/4° W., 61.5 lks. dist., mkd. T34N R19E S1 BT.
- A piñon, 9 ins. diam., bears N. 35° W., 1.085 chs. dist., mkd. T35N R19E S36 BT.

Raise a mound of stone, 4 ft. base, 3 1/2 ft. high, S. of cor.

Deposit a magnet, in a white plastic case, at the base of the stainless steel post.

Survey of a Portion of the South Boundary, T. 35 N., R. 19 E., Gila and Salt River Meridian, Arizona

CHAINS

From this cor. point, Cor. No. 3, Tract No. 2, of the Navajo and Hopi Joint Mineral Ownership Lease 14-20-0450-5743(H)/14-20-0603-9910(N), bears S. 84°21' W., 2.02 chs. dist., monumented with an iron post, 3 ins. diam., firmly set, projecting 25 ins. above the ground, with iron top plate mkd. PEABODY COAL CO. COR. #3 TRACT #2 E.O.

Survey of a Portion of the Subdivisional Lines, T. 35 N., R. 19 E., Gila and Salt River Meridian, Arizona

From the point for the cor. of secs. 20, 21, 28 and 29, established at a point parallel to a fictitious E. bdy. (having a bearing of North) and at 160.00 chs. from a calculated position (320.00 chs. from the cor. of Tps. 34 and 35 N., Rs. 19 and 20 E.) for the cor. of secs. 4, 5, 32 and 33, on the S. bdy. of the Tp.

Set an alum. post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with alum. cap mkd.

2007

from which

- A piñon, 10 ins. diam., bears N. 75 3/4° E., 40.5 lks. dist., mkd. T35N R19E S21 BT.
- A juniper, 13 ins. diam., bears S. 35 1/2° E., 1.19 chs. dist., mkd. T35N R19E S28 BT.
- A juniper, 19 ins. diam., bears S. 30 1/2° W., 61 lks. dist., mkd. T35N R19E S29 BT.

Raise a mound of stone, 3 1/2 ft. base, 3 ft. high, W. of cor.

Deposit a magnet, in a white plastic case, at the base of the alum. post.

From this cor. point, the calculated position for the cor. of secs. 4, 5, 32 and 33, on the S. bdy. of the Tp., hereinbefore described, bears S. 0°03' E., 160.00 chs. dist.

S. 0°03' E., bet. secs. 28 and 29.

Over rolling and broken land.

Point for the 1/4 sec. cor. of secs. 28 and 29.

40.00

CHAINS

Set an alum. post, 28 ins. long, 2 1/2 ins. diam., 27 ins. in the ground, with alum. cap mkd.

T 35 N R 19 E 1/4 S 29 | S 28

2007

from which

An alum. post, 28 ins. long, 2 1/2 ins. diam., set 24 ins. in the ground, for a reference monument, bears S. $45^{\circ}00^{\circ}$ E., 45.5 lks. dist., with an alum. cap mkd. RM T35N R19E 1/4 S28 30.0 FT. TO COR 2007 and an arrow pointing to the cor. Deposit a magnet, in a white plastic case, at the base of the alum. post.

An alum. post, 28 ins. long, 2 1/2 ins. diam., set 25 ins. in the ground, for a reference monument, bears N. 45°04' W., 60.5 lks. dist., with an alum. cap mkd. RM T35N R19E 1/4 S29 40.0 FT. TO COR 2007 and an arrow pointing to the cor. Deposit a magnet, in a white plastic case, at the base of the alum. post.

Deposit a magnet, in a white plastic case, at the base of the alum. post.

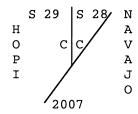
Cor. is located on the bank of a wash, 11 lks. W. of the center, 4 ft. wide, course S. 45° W.

60.275

Point for the closing cor. of secs. 28 and 29, at intersection with the Hopi-Navajo Partition Line, Segment "D".

Set an alum. post, 28 ins. long, 2 1/2 ins. diam., 20 ins. in the ground, with alum. cap mkd.

T 35 N R 19 E



from which

A forked juniper, 10 and 17 ins. diam., bears N. 57 3/4° W., 1.27 chs. dist., mkd. CC S29 BT.

Raise a mound of stone, 3 ft. base, 4 ft. high, N. of cor.

CHAINS

Deposit a magnet, in a white plastic case, at the base of the alum. post.

Cor. falls in a barbed wire fence, 5 strand, bears N. 27° E. and S. 27° W.

From this cor. point, AP D-135, Hopi-Navajo Partition Line, Segment "D", bears S. 27°16' W., 12.24 chs. dist., hereinbefore described.

From this same cor. point, AP D-136, Hopi-Navajo Partition Line, Segment "D", bears N. 27°16' E., 27.76 chs. dist., hereinbefore described.

Land, rolling and broken.

Soil, sandy and rocky.

Timber, piñon and juniper; undergrowth, sage and rabbit brush, and native grasses.

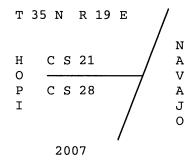
From the cor. of secs. 20, 21, 28 and 29.

East, bet. secs. 21 and 28.

Over rolling and broken land.

Point for the closing cor. of secs. 21 and 28, at intersection with the Hopi-Navajo Partition Line, Segment "D".

Set an alum. post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with alum. cap mkd.



from which

A juniper, 15 ins. diam., bears N. 21 $1/2^{\circ}$ W., 72.5 lks. dist., mkd. CC S21 BT.

Deposit a magnet, in a white plastic case, at the base of the alum. post.

	T. 35 N., R. 19 E., Gila and Salt River Meridian, Arizona
CHAINS	
	Cor. falls in a barbed wire fence, 5 strand, bears N. 27° E. and S. 27° W.
	From this cor. point, AP D-137, Hopi-Navajo Partition Line, Segment "D", bears S. 27°16' W., 6 lks. dist., hereinbefore described.
	From this same cor. point, AP D-138, Hopi-Navajo Partition Line, Segment "D", bears N. 27°16' E., 29.32 chs. dist., hereinbefore described.
	Land, rolling and broken. Soil, sandy dirt. Timber, piñon and juniper; undergrowth, sage and rabbit brush, and native grasses.
	From the cor. of secs. 20, 21, 28 and 29.
	N. 0°03' W., bet. secs. 20 and 21.
	Over rolling and broken land.
40.00	Point for the 1/4 sec. cor. of secs. 20 and 21.
	Set an alum. post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with alum. cap mkd.
	T 35 N R 19 E
	1/4 S 20 S 21
	2007
	from which
	A piñon, 7 ins. diam., bears N. 70 1/2° E., 79.5 lks. dist., mkd. 1/4 S21 BT.
	A piñon, 10 ins. diam., bears N. 46° W., 33.5 lks. dist., mkd. 1/4 S20 BT.
	Raise a mound of stone, 3 ft. base, 3 ft. high, W. of cor.
	Deposit a magnet, in a white plastic case, at the base of the alum. post.
54.65	Point for the closing cor. of secs. 20 and 21, at intersection with the Hopi-Navajo Partition Line, Segment "D".
	Set an alum. post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with alum. cap mkd.

CHAINS **NAVAJO** S 20 S 21 T 35 N R 19 E С C HOPI 2007 from which A juniper, 16 ins. diam., bears S. 42 1/2° E., 1.18 chs. dist., mkd. CC S21 BT. A juniper, 14 ins. diam., bears S. 87 1/4° W., 84 lks. dist., mkd. CC S20 BT. Raise a mound of stone, 3 1/2 ft. base, 3 ft. high, S. of cor. Deposit a magnet, in a white plastic case, at the base of the alum. post. Cor. falls in a barbed wire fence, 5 strand, bears S. 57° E. and N. 57° W. Cor. falls on a sandstone outcrop, on westerly edge of a wash. From this cor. point, AP D-139, Hopi-Navajo Partition Line, Segment "D", bears S. 57°19' E., 12.98 chs. dist., hereinbefore described. From this same cor. point, AP D-140, Hopi-Navajo Partition Line, Segment "D", bears N. 57°19' W., 3.07 chs. dist., hereinbefore described. Land, rolling and broken. Soil, sandy and rocky. Timber, piñon and juniper; undergrowth, sage and rabbit brush, and native grasses. From the cor. of secs. 5, 6, 31 and 32, on the S. bdy. of the Tp., hereinbefore described. N. 0°03' W., bet. secs. 31 and 32. Over rolling and broken land. 0.90 Dirt road, 10 ft. wide, bears S. 80° E. and S. 60° W. 40.00 Point for the 1/4 sec. cor. of secs. 31 and 32.

CHAINS

Set an alum. post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with alum. cap mkd.

T 35 N R 19 E 1/4 S 31 | S 32

2007

from which

- A juniper, 19 ins. diam., bears N. 82 1/2° E., 1.07 chs. dist., mkd. 1/4 S32 BT.
- A juniper, 8 ins. diam., bears S. 37 3/4° W., 13.5 lks. dist., mkd. 1/4 S31 BT.

Raise a mound of stone, 3 1/2 ft. base, 4 ft. high, W. of cor.

Deposit a magnet, in a white plastic case, at the base of the alum. post.

- 44.25 | Wash, 8 ft. wide, 1 ft. deep, drains N. 80° W.
- 61.70 Yucca Flat Wash, 12 ft. wide, 2 ft. deep, drains N. 60° W.
- 80.00 | Point for the cor. of secs. 29, 30, 31 and 32.

Set an alum. post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with alum. cap mkd.

2007

from which

- A piñon, 18 ins. diam., bears N. 37 3/4° E., 1.105 chs. dist., mkd. T35N R19E S29 BT.
- A juniper, 13 ins. diam., bears S. 40° W., 90.5 lks. dist., mkd. T35N R19E S31 BT.
- A piñon, 11 ins. diam., bears N. 26 1/4° W., 22.5 lks. dist., mkd. T35N R19E S30 BT.

Raise a mound of stone, 3 ft. base, 2 1/2 ft. high, W. of cor.

Deposit a magnet, in a white plastic case, at the base of the alum. post.

	T. 35 N., R. 19 E., Gila and Salt River Meridian, Arizona
CHAINS	
	Cor. falls on a northwest sloping wash bank.
	Land, rolling and broken.
	Soil, sandy and rocky. Timber, piñon and juniper; undergrowth, none.
	East, bet. secs. 29 and 32.
40.00	Point for the 1/4 sec. cor. of secs. 29 and 32.
	Set an alum. post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with alum. cap mkd.
	T 35 N R 19 E
	S 29 1/4 ——
	S 32
	2007
	from which
	A piñon, 11 ins. diam., bears N. 17 3/4° E., 89 lks. dist., mkd. 1/4 S29 BT.
	A juniper, 18 ins. diam., bears N. 65 1/2° W., 45.5 lks. dist., mkd. 1/4 S29 BT.
	Raise a mound of stone, 3 1/2 ft. base, 3 1/2 ft. high, N. of cor.
	Deposit a magnet, in a white plastic case, at the base of the alum. post.
69.82	Point for the closing cor. of secs. 29 and 32, at intersection with the Hopi-Navajo Partition Line, Segment "D".
	Set an alum. post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with alum. cap mkd.

CHAINS	T. 35 N., R. 19 E., GIIA AND SAIL RIVEL MELIDIAN, ALIZONA
CHAINS	
	T 35 N R 19 E N H C S 29 A O V
	P C S 32 A J O
	2007
	from which
	A juniper, 18 ins. diam., bears S. 66 1/2° W., 1.525 chs. dist., mkd. CC S32 BT.
	A forked piñon, 9 and 12 ins. diam., bears N. 18 3/4° W., 1.315 chs. dist., mkd. CC S29 BT.
	Raise a mound of stone, 3 ft. base, 3 ft. high, W. of cor.
	Cor. falls in a barbed wire fence, 5 strand, bears N. 27° E. and S. 27° W.
	From this cor. point, AP D-134, Hopi-Navajo Partition Line, Segment "D", bears S. 27°16' W., 30.055 chs. dist., hereinbefore described.
	From this same cor. point, AP D-135, Hopi-Navajo Partition Line, Segment "D", bears N. 27°16' E., 9.955 chs. dist., hereinbefore described.
	Land, rolling and broken. Soil, sandstone. Timber, piñon and juniper; undergrowth, sage and rabbit brush, and native grasses.
	From the cor. of secs. 29, 30, 31 and 32.
	West, bet. secs. 30 and 31.
	Over rolling and broken land.
0.25	Wash, 8 ft. wide, 1 ft. deep, drains S. 10° W.
40.00	Point for the 1/4 sec. cor. of secs. 30 and 31.
	Set an alum. post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with alum. cap mkd.

	1. 33 N., K. 19 E., Gila and Sait River Meridian, Arizona
CHAINS	
	T 35 N R 19 E
	S 30
	1/4 ——
	S 31
	2007
	from which
	A juniper, 13 ins. diam., bears N. 4 3/4° E., 27 lks. dist., mkd. 1/4 S30 BT.
	A piñon, 8 ins. diam., bears S. 16 1/2° W., 1.345 chs. dist., mkd. 1/4 S31 BT.
	The marks X BO on face of a sandstone slab, 3 1/2 x 1 1/2 ft., bears N. 68 1/2° W., 1.465 chs. dist., with a drill hole at the intersection of the two lines of the X. The sandstone slab is at the top of the west bank of a wash.
	Raise a mound of stone, 3 1/2 ft. base, 3 ft. high, N. of cor.
	Deposit a magnet, in a white plastic case, at the base of the alum. post.
40.65	Wash, 15 ft. wide, 2 ft. deep, drains S. 30° E.
78.86	The cor. of secs. 25, 30, 31 and 36, on the W. bdy. of the Tp., monumented with an alum. post, 2 1/2 ins. diam., firmly set, projecting 4 ins. above the ground, with an alum. cap mkd. T35N R18E R19E S25 S30 S36 S31 2007, from which the orig. bearing trees
	A piñon, 6 ins. diam., bears S. 27 1/2° W., 1.26 chs. dist., with scribe marks T35N R18E S36 BT visible on an open blaze.
	A juniper, 8 ins. diam., bears N. 84° W., 50 lks. dist., with scribe marks T35N R18E S25 BT visible on an open blaze.
	An accessory mound of stone, 3 ft. base, 2 1/2 ft. high, is located W. of cor.
	Land, rolling and broken. Soil, sandy and rocky. Timber, piñon and juniper; undergrowth, sage and rabbit brush, mormon tea and native grasses.
	From the cor. of secs. 29, 30, 31 and 32.
I	1

	T. 35 N., R. 19 E., Gila and Salt River Meridian, Arizona
CHAINS	
	N. 0°03' W., bet. secs. 29 and 30.
	Over rolling and broken land.
0.20	Wash, 4 ft. wide, 1 ft. deep, drains S. 75° W.
40.00	Point for the 1/4 sec. cor. of secs. 29 and 30.
	Set an alum. post, 28 ins. long, 2 1/2 ins. diam., 25 ins. in the ground, with alum. cap mkd.
	T 35 N R 19 E 1/4 S 30 S 29
	2007
	from which
	A piñon, 7 ins. diam., bears S. 40 3/4° E., 1.115 chs. dist., mkd. X BT.
	A juniper, 12 ins. diam., bears S. 40 3/4° W., 1.735 chs. dist., mkd. 1/4 S30 BT.
	Raise a mound of stone, 3 ft. base, 3 ft. high, W. of cor.
	Deposit a magnet, in a white plastic case, at the base of the alum. post.
80.00	Point for the cor. of secs. 19, 20, 29 and 30.
	Set an alum. post, 28 ins. long, 2 1/2 ins. diam., 25 ins. in the ground, with alum. cap mkd.
	T 35 N R 19 E
	S 19 S 20 S 30 S 29
	2007
	from which
	A piñon, 8 ins. diam., bears N. 27 1/2° E., 1.37 chs.
	dist., mkd. T35N R19E S20 BT.
	A piñon, 9 ins. diam., bears S. 55 1/2° E., 1.305 chs. dist., mkd. T35N R19E S29 BT.
	A piñon, 7 ins. diam., bears S. 23 3/4° W., 68 lks. dist., mkd. T35N R19E S30 BT.

	T. 35 N., R. 19 E., Gila and Salt River Meridian, Arizona	
CHAINS		
	A forked juniper, 9 and 15 ins. diam., bears N. 87 1/2° W., 73.5 lks. dist., mkd. T35N R19E S19 BT.	
	Raise a mound of stone, 3 1/2 ft. base, 4 ft. high, W. of cor.	
	Deposit a magnet, in a white plastic case, at the base of the alum. post.	
	Land, rolling and broken. Soil, shale. Timber, piñon and juniper; undergrowth, sparse sage and rabbit brush, and native grasses.	
	From the cor. of secs. 20, 21, 28 and 29.	
	West, bet. secs. 20 and 29.	
0.45	Trail road, 8 ft. wide, bears N. and S.	
40.00	40.00 Point for the 1/4 sec. cor. of secs. 20 and 29.	
	Set an alum. post, 28 ins. long, 2 1/2 ins. diam., 23 ins. in the ground, with alum. cap mkd.	
	T 35 N R 19 E S 20 1/4 —— S 29	
	2007	
	from which	
	A forked piñon, 4 and 5 ins. diam., bears N. 19 3/4° E., 1.625 chs. dist., mkd. X BT.	
	A juniper, 10 ins. diam., bears S. 72 1/4° E., 2.005 chs. dist., mkd. 1/4 S29 BT.	
	Raise a mound of stone, 3 ft. base, 3 ft. high, N. of cor.	
	Deposit a magnet, in a white plastic case, at the base of the alum. post.	
41.45	Abandoned dirt road, 9 ft. wide, bears S. 20° E. and N. 35° W.	
79.80	Abandoned dirt road, 12 ft. wide, bears N. and S.	
80.00	The cor. of secs. 19, 20, 29 and 30.	

Survey of a Portion of the Subdivisional Lines, T. 35 N., R. 19 E., Gila and Salt River Meridian, Arizona			
CHAINS			
	Land, rolling and broken. Soil, rocky with thin clay soil. Timber, piñon and juniper; undergrowth, sage and rabbit brush, and cliff rose.		
	West, bet. secs. 19 and 30.		
	Over rolling and broken land.		
40.00	Point for the 1/4 sec. cor. of secs. 19 and 30.		
	Set an alum. post, 28 ins. long, 2 1/2 ins. diam., 25 ins. in the ground, with alum. cap mkd.		
	T 35 N R 19 E S 19 1/4 — S 30		
	2007		
	from which		
	A juniper, 13 ins. diam., bears S. 0 1/4° E., 64.5 lks. dist., mkd. 1/4 S30 BT.		
	A piñon, 6 ins. diam., bears S. 88° W., 1.73 chs. dist., mkd. X BT.		
	Raise a mound of stone, 3 ft. base, 3 1/2 ft. high, N. of cor.		
	Deposit a magnet, in a white plastic case, at the base of the alum. post.		
	From this cor. point, Cor. No. 15, Tract No. 2, of Navajo and Hopi Joint Mineral Ownership Lease 14-20-0450-5743(H)/14-20-0603-9910(N), bears N. 21°37' W., 37.08 chs. dist., monumented with an iron post, 3 ins. diam., firmly set in a mound of stone, 3 ft. base, 1 1/2 ft. high, projecting 25 ins. above the ground, with iron top plate mkd. PEABODY COAL CO. COR. #15 TRACT #2 E.O.		
40.20	Abandoned dirt road, 8 ft. wide, bears N. 20° E. and S. 20° W.		
78.77	The cor. of secs. 19, 24, 25 and 30, on the W. bdy. of the Tp., monumented with a 60 penny nail, from which the reference monuments		
	An alum. post, 2 1/2 ins. diam., firmly set, projecting 6 ins. above the ground, encircled by a rock collar, bears S. 19°58' E., 45.5 lks. dist., with alum. cap mkd.		

RM T35N R19E S30 30.0 FT. TO COR 2007 and an arrow

pointing to the cor.

CHAINS

An alum. post, 2 1/2 ins. diam., firmly set, projecting 6 ins. above the ground, encircled by a rock collar, bears N. 19°57' W., 45.5 lks. dist., with alum. cap mkd. RM T35N R18E S24 30.0 FT. TO COR 2007 and an arrow pointing to the cor.

Land, rolling and broken.

Soil, sandy and rocky.

Timber, piñon and juniper; undergrowth, sage and rabbit brush, mormon tea and native grasses.

From the cor. of secs. 19, 20, 29 and 30.

N. 0°03' W., bet. secs. 19 and 20.

Over rolling and broken land.

40.00

Point for the 1/4 sec. cor. of secs. 19 and 20.

Set an alum. post, 28 ins. long, 2 1/2 ins. diam., 27 ins. in the ground, with alum. cap mkd.

T 35 N R 19 E 1/4 S 19 | S 20

2007

from which

- A juniper, 19 ins. diam., bears S. 67 1/2° E., 66.5 lks. dist., mkd. 1/4 S20 BT.
- A piñon, 9 ins. diam., bears S. 24 1/4° W., 1.405 chs. dist., mkd. 1/4 S19 BT.

Raise a mound of stone, 3 1/2 ft. base, 3 ft. high, W. of cor.

Deposit a magnet, in a white plastic case, at the base of the alum. post.

45.90 | Wash, 13 ft. wide, 2 ft. deep, drains N. 30° E.

47.275

Point for the closing cor. of secs. 19 and 20, at intersection with the Hopi-Navajo Partition Line, Segment "D".

Set an alum. post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with alum. cap mkd.

Survey of a Portion of the Subdivisional Lines,

T. 35 N., R. 19 E., Gila and Salt River Meridian, Arizona CHAINS OLAVAI S19 S20 T 35 N R 19 E С HOPI 2007 from which A juniper, 20 ins. diam., bears S. 41 3/4° E., 76.5 lks. dist., mkd. CC S20 BT. A piñon, 9 ins. diam., bears S. 57 1/2° W., 1.065 chs. dist., mkd. CC S19 BT. Raise a mound of stone, 3 1/2 ft. base, 3 ft. high, S. of cor. Deposit a magnet, in a white plastic case, at the base of the alum. post. Cor. falls in a barbed wire fence, 5 strand, bears N. 83° E. and s. 83° W. Cor. falls on a sandstone outcrop, on westerly edge of a wash. From this cor. point, AP D-141, Hopi-Navajo Partition Line, Segment "D", bears N. 83°20' E., 37.925 chs. dist., hereinbefore described. From this same cor. point, AP D-142, Hopi-Navajo Partition Line, Segment "D", bears S. 83°20' W., 2.075 chs. dist., hereinbefore described. Land, rolling and broken. Soil, sandy and rocky. Timber, piñon and juniper; undergrowth, sage and rabbit brush, and native grasses.

T. 35 N., R. 19 E., Gila and Salt River Meridian, Arizona

CHAINS

GENERAL DESCRIPTION

This survey is of that portion of the Hopi Reservation that falls within this township, and was requested by the Hopi Tribe to aid in clarifying the boundary location of the Peabody Leasehold. Portions of Lease Numbers 14-20-0450-5743 and 14-20-0603-9910 fall within every section of the surveyed lands. A description of the leased lands was obtained from the Peabody Mining, Co. office, located on Black Mesa, along Navajo Route 41, and is contained in a document labeled "Attachment 2 Description of Leased Lands". No record of a survey was found, but there are monuments for these tracts in the ground, as described in the body of these field notes (A search was made for Cor. No. 14, Tract 2, of the lease, with no evidence of the original corner found). From conversations with employees of the mining company it is estimated that the corners were set in the mid to late 1960's.

Primary access to this survey was an abandoned graded road that branches off of Navajo Route 41 and traverses easterly through sections 30, 29 and into section 28. There is a locked gate at the Hopi-Navajo Partition Line. There are numerous abandoned roads that branch off of this main easterly road that have been sealed off with berms of dirt and rock. A lot of these secondary roads have not been used in quite some time and are in bad condition.

The terrain is rolling and broken hills with areas of large sandstone outcrops, and numerous washes.

The elevation ranges from 6,300 ft. to 6,800 ft. Scattered piñon and juniper trees cover the majority of this survey, with sage, cliff rose and rabbit brush undergrowth, and morman tea and native grasses.

The mean magnetic declination of 11 $1/4^{\circ}$ E. was derived from the United States Geological Survey computer program GEOMAG, utilizing the World Magnetic Model for Epoch 2005 for the dates of survey.

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FIELD ASSISTANTS

NAMES	CAPACITY
Steven F. Long	Surveying Technician
Mark R. Searles	Surveying Technician

CERTIFICATE OF SURVEY

I, Craig S. Dukart, Cadastral Surveyor, HEREBY CERTIFY upon honor, that in pursuance of special instructions bearing date of the 13th day of July, 2007, I have dependently resurveyed a portion of the Hopi-Navajo Partition Line, Segment "D", and surveyed a portion of the South boundary and a portion of the subdivisional lines, T. 35 N., R. 19 E., Gila and Salt River Meridian, in the State of Arizona, which are represented in the foregoing field notes as having been executed by me and under my direction. Said survey has been made in strict conformity with said special instructions, the Manual of Instructions for the Survey of the Public Lands of the United States, and in specific manner described in the foregoing field notes.

JANUART 18, 2008
(Date)

(Cadastral Surveyor)

CERTIFICATE OF APPROVAL

BUREAU OF LAND MANAGEMENT Phoenix, Arizona

The foregoing field notes of the dependent resurvey of a portion of the Hopi-Navajo Partition Line, Segment "D", and survey of a portion of the South boundary and a portion of the subdivisional lines, T. 35 N., R. 19 E., Gila and Salt River Meridian, in the State of Arizona, executed by Craig S. Dukart, Cadastral Surveyor, having been critically examined and found correct, are hereby approved.

3-/3-2008 Unthony E Carrow Acting (Chief Cadastral Surveyor of Arizona

CERTIFICATE OF TRANSCRIPT

I CERTIFY That the foregoing transcript of the field notes of the above described surveys in T. 35 N., R. 19 E., Gila and Salt River Meridian, Arizona, is a true copy of the orig. field notes.

(Date) (Chief Cadastral Surveyor of Arizona)