

Form 3860-10  
(February 1987)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Mineral Survey Number

4819

State

Arizona

Land District

Arizona

FIELD NOTES

Of the Survey of the Mining Claim of *(name and address of claimant)*

ASARCO Incorporated  
P. O. Box 5747  
Tucson, AZ 85703-0747

Known as the *(name of group, if any)*

Helvetia Group

NAME OF CLAIM(S)

NAME OF LOCATION	DATE			BLM MINING CLAIM SERIAL NUMBER
	LOCATED AND AMENDED	RECORDED WITH COUNTY	RECORDED WITH BLM	
GUNSIGHT #48	9-20-62	9-24-62	3-15-79	A MC 36134
GUNSIGHT #49	9-19-62	9-24-62	3-15-79	36135
GUNSIGHT NO. 50 Amended	9-19-62 3-26-63	9-24-62 4-1-63	3-15-79	36136
SANTA RITA #29	8-29-63	9-3-63	7-6-79	46768

LOCATION OF CLAIM(S)

Mining district Helvetia			County Pima	
Section 36	Township 18 South	Range 15 East	Meridian Gila & Salt River	Survey under order dated 12/19/80, 1/23/89
Survey commenced 12/20/80		Survey completed 9/1/81	Name of Mineral Surveyor Harvey W. Smith	

## Mineral Survey No. 4819

LEFT

This survey was made with a Swiss Kern theololite, Model DKM 1. No. 77769, having horizontal and vertical circles, 50 mm. in diam. The circles are graduated in degrees and 20-minute increments. An optical micrometer, adjustable to the vertical and horizontal circles, permits the reading of angles direct to ten-second accuracy and estimating to one-second accuracy. The instrument was in good condition at the time of the survey and all adjustments were in good order.

All azimuths in this record were determined by the method of horizontal-angles-right referred to the meridian determined by the following observation:

August 27, 1981, at Cor. No. 2 of the SANTA RITA #29 lode, latitude  $31^{\circ}49'17.7''\text{N}$ . and longitude  $110^{\circ}45'32.6''\text{W}$ ., elevation 5,400 ft. above sea level, and temperature  $87^{\circ}\text{F}$ ., make a series of six altitude observations on the sun for azimuth at approximately equal time intervals, three each with the telescope in direct and reversed positions, observing opposite limbs of the sun, and reading the horizontal angle right from a reference point about 2,800 ft. northeasterly S.E. to the sun.

Mean time of observation,  
105th meridian standard  
time =  $8^{\text{h}}46^{\text{m}}15^{\text{s}}$  a.m.

Declination of sun at mean  
time of observation =  $9^{\circ}56'23.6''\text{N}$ .

Mean observed vertical  
angle to sun's center =  $39^{\circ}59'17''$

Mean horizontal angle from  
reference point clockwise  
to sun's center =  $49^{\circ}09'40''$

True bearing to reference  
point =  $\text{N. } 55^{\circ}37'15''\text{E}$ .

The lines were measured with a Lufkin steel tape, 300 ft. in length, graduated every foot for 299 ft. and the remaining foot graduated to tenths and hundredths the tape was compared to an Invar standard tape at the beginning of the survey and found to be correct. In addition to the steel tape, a K & E Autoranger

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FEET	
	<p>infrared distance measuring unit was used to measure some of the lines. Its accuracy was checked against a line measured with the foregoing steel tape and found to be correct.</p> <p>All lines and connections of this survey were run by direct methods.</p> <p>The magnetic declination observed at each corner of the survey gave a uniform value of 13°30'E.</p> <hr/> <p style="text-align: center;">Mineral Survey No. 4819</p> <hr/> <p style="text-align: center;">GUNSIGHT #48 LODE</p> <p>At Cor. No. 1 of the GUNSIGHT #48 lode.</p> <p>Set an iron post, 30 ins. long, 3/4 in. diam., 12 ins. in the ground, in a concrete and rock base with a brass cap firmly secured to the iron post, mkd. X G.48 1 U.S.M.S. 4819; from which</p> <p style="padding-left: 40px;">The 1/4 sec. cor. of secs. 25 and 36, T.18 S., R.15 E., G.&amp; S.R.M., bears N.25°24'59"W., 2,469.30 ft. dist., monumented with an iron post, 1 in. diam., 12 ins. above ground, firmly set, with a brass cap properly mkd.</p> <p style="padding-left: 40px;">Cor. No. 2, M.S. No. 4718 SANTA RITA #26 lode, identical with Cor. No. 4, SANTA RITA #29 lode of this survey, bears S.21°51'47"W., 299.23 ft. dist.</p> <p style="padding-left: 40px;">A wood post, 4 x 4 ins. in size, 4 ft. above ground, sets adjacent to the iron post.</p> <p>No local bearing objects or bearing trees available.</p> <p style="text-align: center;">Thence S.1°52'30"W.</p> <p>293.35 Intersect line 1-2, M.S. No. 4718 SANTA RITA #26 lode, common with line 4-1 SANTA RITA #29 lode of this survey, at a point from which Cor. No. 2, identical with Cor. No. 4 of the SANTA RITA #29 lode, bears N.81°21'14"W., 103.00 ft. dist.</p>

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FEET	
1,489.67	<p>Cor. No. 2.</p> <p>Set an iron post, 30 ins. long, 3/4 in. diam., 12 ins. in the ground, in a concrete and rock base with a brass cap firmly secured to the iron post, mkd. X G.48 2 U.S.M.S. 4819; from which</p> <p style="padding-left: 40px;">A wood post, 4 x 4 ins. in size, 4 ft. above ground, sets adjacent to the iron post.</p> <p>No local bearing objects or bearing trees available.</p> <p style="text-align: center;">Thence N.89°40'15"W.</p>
131.75	Intersect line 3-4 SANTA RITA #29 lode of this survey.
299.73	Lode line; discovery point bears N.1°52'30"E., 100.00 ft. dist.
534.98	Intersect line 1-2 GUNSIGHT #49 lode of this survey.
599.73	<p>Cor. No. 3.</p> <p>Set an iron post, 30 ins. long, 3/4 in. diam., 12 ins. in the ground, in a concrete and rock base with a brass cap firmly secured to the iron post, mkd. X G.48 3 U.S.M.S. 4819; from which</p> <p style="padding-left: 40px;">A wood post, 4 x 4 ins. in size, 4 ft. above ground, sets adjacent to the iron post.</p> <p>No local bearing objects or bearing trees available.</p> <p style="text-align: center;">Thence N.1°52'30"E.</p>
1,293.53	Intersect line 4-1, M.S. No. 1297A Oregon Copper lode, at a point from which Cor. No. 1, identical with Cor. No. 5 of the Coconino lode of the same survey, bears S.79°24'15"W., 25.96 ft. dist.
1,300.04	Intersect line 4-1 GUNSIGHT #49 lode of this survey.
1,489.67	<p>Cor. No. 4.</p> <p>Set an iron post, 30 ins. long, 3/4 in. diam., 12 ins. in the ground, in a concrete and rock base with a brass cap firmly secured to the iron post, mkd. X G.48 4 U.S.M.S. 4819; from which</p>

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FEET	
	<p>Cor. No. 4, M.S. No. 1297A Oregon Copper lode, bears S.78°36'35"E., 511.53 ft. dist.</p> <p>A wood post, 4 x 4 ins. in size, 4 ft. above ground, sets adjacent to the iron post.</p> <p>No local bearing objects or bearing trees available.</p> <p>Thence S.89°40'15"E.</p>
300.00	<p>Lode line; discovery point bears S.1°52'30"W., 1,389.67 ft. dist.</p>
502.96	<p>Intersect line 2-3, M.S. No. 4718 SANTA RITA #26 lode, at a point from which Cor. No. 2, identical with Cor. No. 4 of the SANTA RITA #29 lode of this survey, bears S.3°01'W., 278.65 ft. dist.</p>
506.63	<p>Intersect line 3-4, M.S. No. 1297A Oregon Copper lode, at a point from which Cor. No. 4 bears S.3°00'32"W., 98.25 ft. dist.</p>
599.73	<p>Cor. No. 1, and place of beginning.</p>
	<p style="text-align: center;"><b>GUNSIGHT #49 LODE</b></p> <p>At Cor. No. 1 of the GUNSIGHT #49 lode.</p> <p>Set an iron post, 30 ins. long, 3/4 in. diam., 12 ins. in the ground, in a concrete and rock base with a brass cap firmly secured to the iron post, mkd. X G.49 1 U.S.M.S. 4819; from which</p> <p style="padding-left: 40px;">The 1/4 sec. cor. of secs. 25 and 36, T.18 S., R.15 E., G.&amp; S.R.M., bears N.11°21'11"W., 2,464.68 ft. dist., hereinbefore described.</p> <p style="padding-left: 40px;">Cor. No. 1, M.S. No. 1297A Oregon Copper lode, identical with Cor. No. 5, Coconino lode of the same survey, bears S.78°52'53"W., 58.11 ft. dist.</p> <p style="padding-left: 40px;">A wood post, 4 x 4 ins. in size, 4 ft. above ground, sets adjacent to the iron post.</p> <p>No local bearing objects or bearing trees available.</p> <p style="text-align: center;">Thence S.0°24'01"W.</p>

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FEET		
0.54	Intersect line 4-1, M.S. No. 1297A Oregon Copper lode, at a point from which Cor. No. 1, identical with Cor. No. 5 of the Coconino lode of the same survey, bears S.79°24'15"W., 58.01 ft. dist.	
1,299.68	Intersect line 2-3 GUNSIGHT #48 lode of this survey.	
1,500.00	Cor. No. 2.  Set an iron post, 30 ins. long, 3/4 in. diam., 12 ins. in the ground, in a concrete and rock base with a brass cap firmly secured to the iron post, mkd. X G.49 2 U.S.M.S. 4819; from which  A wood post, 4 x 4 ins. in size, 4 ft. above ground, sets adjacent to the iron post.  No local bearing objects or bearing trees available.  Thence N.89°52'50"W.	
294.93	Lode line; discovery point bears N.0°24'01"E., 200.00 ft. dist.	
594.93	Cor. No. 3, on line 1-2 GUNSIGHT No. 50 lode of this survey.  Set an iron post, 30 ins. long, 3/4 in. diam., 12 ins. in the ground, in a concrete and rock base with a brass cap firmly secured to the iron post, mkd. X G.49 3 U.S.M.S. 4819; from which  A wood post, 4 x 4 ins. in size, 4 ft. above ground, sets adjacent to the iron post.  No local bearing objects or bearing trees available.  Thence N.0°24'01"E.	
1,096.91	Intersect line 2-3, M.S. No. 4793 LAST CHANCE No 2 lode, at a point from which Cor. No. 2 bears N.89°59'36"E., 37.88 ft. dist.	
1,201.45	Cor. No. 1 GUNSIGHT No. 50 lode of this survey.	
1,500.00	Cor. No. 4.	

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FILE	
	<p>Set an iron post, 30 ins. long, 3/4 in. diam., 12 ins. in the ground, in a concrete and rock base with a brass cap firmly secured to the iron post, mkd. X G.49 4 U.S.M.S. 4819; from which</p> <p>Cor. No. 2, M.S. No. 4793 LAST CHANCE No 2 lode, bears S.4°58'18"E., 404.60 ft. dist.</p> <p>A wood post, 4 x 4 ins. in size, 4 ft. above ground, sets adjacent to the iron post.</p> <p>No local bearing objects or bearing trees available.</p> <p>Thence S.89°52'50"E.</p>
47.28	Intersect line 1-2, M.S. No. 1297A Coconino lode, at a point from which Cor. No. 1 bears S.2°37'53"W., 104.22 ft. dist.
52.45	Intersect line 1-2, M.S. No. 4793 LAST CHANCE No 2 lode, at a point from which Cor. No. 2 bears S.2°28'14"W., 403.34 ft. dist.
300.00	Lode line; discovery point bears S.0°24'01"W., 1,300.00 ft. dist.
538.55	Intersect line 4-5, M.S. No. 1297A Coconino lode, common with line 1-2 Oregon Copper lode of the same survey, at a point from which Cor. No. 5, identical with Cor. No. 1 of the Oregon Copper lode, bears S.3°15'W., 11.34 ft. dist.
563.64	Intersect line 3-4 GUNSIGHT #48 lode of this survey.
594.93	Cor. No. 1, and place of beginning.
	<p>GUNSIGHT No. 50 LODE</p> <p>At Cor. No. 1 of the GUNSIGHT No. 50 lode, on line 3-4 GUNSIGHT #49 lode of this survey.</p> <p>Set an iron post, 30 ins. long, 3/4 in. diam., 12 ins. in the ground, in a concrete and rock base with a brass cap firmly secured to the iron post, mkd. X G.50 1 U.S.M.S. 4819; from which</p>

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FEET	
	<p>The 1/4 sec. cor. of secs. 25 and 36, T.18 S., R.15 E., G.&amp; S.R.M., bears N.1°21'35"E., 2,716.06 ft. dist., hereinbefore described.</p> <p>A wood post, 4 x 4 ins. in size, 4 ft. above ground, sets adjacent to the iron post.</p> <p>No local bearing objects or bearing trees available.</p> <p>Thence S.0°24'01"W.</p>
104.54	Intersect line 2-3, M.S. No. 4793 LAST CHANCE No 2 lode, at a point from which Cor. No. 3 bears S.89°59'36"W., 562.12 ft. dist.
1,201.45	Cor. No. 3 GUNSIGHT #49 lode of this survey.
1,493.38	Cor. No. 2.
	<p>Set an iron post, 30 ins. long, 3/4 in. diam., 12 ins. in the ground, in a concrete and rock base with a brass cap firmly secured to the iron post, mkd. X G.50 2 U.S.M.S. 4819; from which</p> <p>A wood post, 4 x 4 ins. in size, 4 ft. above ground, sets adjacent to the iron post.</p> <p>No local bearing objects or bearing trees available.</p> <p>Thence N.89°10'52"W.</p>
299.91	Lode line; discovery point bears N.0°24'01"E., 500.00 ft. dist.
599.91	Cor. No. 3.
	<p>Set an iron post, 30 ins. long, 3/4 in. diam., 12 ins. in the ground, in a concrete and rock base with a brass cap firmly secured to the iron post, mkd. X G.50 3 U.S.M.S. 4819; from which</p> <p>Cor. No. 4, M.S. No. 2444 Excelsior lode, bears N.16°14'34"E., 699.21 ft. dist.</p> <p>A wood post, 4 x 4 ins. in size, 4 ft. above ground, sets adjacent to the iron post.</p> <p>No local bearing objects or bearing trees available.</p>



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FEET	
	Thence N.0°24'01"E.
698.12	Intersect line 3-4, M.S. No. 2444 Excelsior lode, at a point from which Cor. No. 4 bears S.82°E., 192.57 ft. dist.
1,493.38	<p>Cor. No. 4.</p> <p>Set an iron post, 30 ins. long, 3/4 in. diam., 12 ins. in the ground, in a concrete and rock base with a brass cap firmly secured to the iron post, mkd. X G.50 4 U.S.M.S. 4819; from which</p> <p>Cor. No. 3, M.S. No. 4793 LAST CHANCE No 2 lode, bears S.18°06'12"E., 119.07 ft. dist.</p> <p>A wood post, 4 x 4 ins. in size, 4 ft. above ground, sets adjacent to the iron post.</p> <p>No local bearing objects or bearing trees available.</p> <p>Thence S.89°10'52"E.</p>
41.85	Intersect line 3-4, M.S. No. 4793 LAST CHANCE No 2 lode, at a point from which Cor. No. 3 bears S.2°27'45"W., 112.68 ft. dist.
300.00	Lode line; discovery point bears S.0°24'01"W., 993.38 ft. dist.
301.35	Intersect line 4-1, M.S. No. 2444 Excelsior lode, at a point from which Cor. No. 4 bears S.8°05'11"W., 825.95 ft. dist.
599.91	Cor. No. 1, and place of beginning.
	<p style="text-align: center;">SANTA RITA #29 LODE</p> <p>Beginning at Cor. No. 1 of the SANTA RITA #29 lode, identical with Cor. No. 1, M.S. No. 4718 SANTA RITA #26 lode.</p> <p>Found an iron post, 3/4 in. diam., 12 ins. above ground, in a concrete and rock base, with a brass cap firmly secured to the iron post, mkd. X S.R.26 1 U.S.M.S. 4718, to which I add marks S.R.29 1 U.S.M.S. 4819; from which</p>

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FEET	
	<p>The 1/4 sec. cor. of secs. 25 and 36, T.18 S., R.15 E., G.&amp; S.R.M., bears N.30°43'21"W., 3,022.88 ft. dist., hereinbefore described.</p> <p>Cor. No. 3, M.S. No. 4718 SANTA RITA #27 lode, bears S.9°03'25"W., 594.09 ft. dist.</p> <p>A wood post, 4 x 4 ins. in size, 4 ft. above ground, sets adjacent to the iron post.</p> <p>No local bearing objects or bearing trees available.</p> <p style="text-align: center;">Thence S.3°15'56"W.</p>
595.51	Intersect line 2-3, M.S. No. 4718 SANTA RITA #27 lode, at a point from which Cor. No. 3 bears N.82°28'49"W., 60.11 ft. dist.
609.	Center of unimproved dirt road, 16. ft. wide, bears N.65°E. and S.65°W.
1,429.98	<p>Cor. No. 2.</p> <p>Set an iron post, 30 ins. long, 3/4 in. diam., 12 ins. in the ground, in a concrete and rock base with a brass cap firmly secured to the iron post, mkd. X S.R.29 2 U.S.M.S. 4819; from which</p> <p style="text-align: center;">A wood post, 4 x 4 ins. in size, 4 ft. above ground, sets adjacent to the iron post.</p> <p>No local bearing objects or bearing trees available.</p> <p style="text-align: center;">Thence N.81°21'14"W.</p>
301.40	Lode line; discovery point bears N.3°15'56"E., 165.00 ft. dist.
602.80	<p>Cor. No. 3.</p> <p>Set an iron post, 30 ins. long, 3/4 in. diam., 12 ins. in the ground, in a concrete and rock base with a brass cap firmly secured to the iron post, mkd. X S.R.29 3 U.S.M.S. 4819; from which</p> <p style="text-align: center;">A wood post, 4 x 4 ins. in size, 4 ft. above ground, sets adjacent to the iron post.</p> <p>No local bearing objects or bearing trees available.</p>

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FEET	
	Thence N.3°15'56"E.
217.60	Intersect line 2-3 GUNSIGHT #48 lode of this survey.
1,429.98	Cor. No. 4, identical with Cor. No. 2, M.S. No. 4718 SANTA RITA #26 lode.  Found an iron post, 3/4 in. diam., 12 ins. above ground, in a concrete and rock base with a brass cap firmly secured to the iron post, mkd. X S.R.26 2 U.S.M.S. 4718, to which I add marks S.R.29 4 U.S.M.S. 4819; from which  A wood post, 4 x 4 ins. in size, 4 ft. above ground, sets adjacent to the iron post.  No local bearing objects or bearing trees available.
	Thence S.81°21'14"E.
103.00	Intersect line 1-2 GUNSIGHT #48 lode of this survey.
301.40	Lode line; discovery point bears S.3°15'56"W., 1,264.98 ft. dist.
538.28	Intersect line 3-4, M.S. No. 4718 SANTA RITA #27 lode, at a point from which Cor. No. 3 bears S.2°51'15"W., 597.12 ft. dist.
602.80	Cor. No. 1, and place of beginning.
	AREAS
	Acres
	Total area, GUNSIGHT #48 lode ----- 20.502
	Area in conflict with:
	M.S. No. 1297A Oregon Copper lode ----- 1.707
	M.S. No. 4718 SANTA RITA #26 lode ----- 0.654
	M.S. No. 4718 SANTA RITA #26 lode, ex- clusive of its conflict with M.S. No. 1297A Oregon Copper lode ----- 0.645
	GUNSIGHT #49 lode of this survey ----- 1.433
	GUNSIGHT #49 lode of this survey, ex- clusive of its conflict with M.S. No. 1297A Oregon Copper lode ----- 1.430

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FEET		
	<b>AREAS</b>	<b>Acres</b>
	Total area, GUNSIGHT #49 lode -----	20.486
	Area in conflict with:	
	M.S. No. 1297A Coconino lode -----	0.651
	M.S. No. 1297A Oregon Copper lode -----	0.008
	M.S. No. 4793 LAST CHANCE No 2 lode -----	0.418
	M.S. No. 4793 LAST CHANCE No 2 lode, exclusive of its conflict with M.S. No. 1297A Coconino lode -----	0.405
	Total area, GUNSIGHT No. 50 lode -----	20.566
	Area in conflict with:	
	M.S. No. 2444 Excelsior lode -----	4.576
	M.S. No. 4793 LAST CHANCE No 2 lode -----	1.396
	M.S. No. 4793 LAST CHANCE No 2 lode, exclusive of its conflict with M.S. No. 2444 Excelsior lode -----	0.750
	Total area, SANTA RITA #29 lode -----	19.701
	Area in conflict with:	
	M.S. No. 4718 SANTA RITA #27 lode -----	0.850
	GUNSIGHT #48 lode of this survey -----	3.236
	<b>LOCATION</b>	
	This survey is located in the NW, SW, SE & NE 1/4s sec. 36, T.18 S., R.15 E., G.& S.R.M.	
	The survey of the GUNSIGHT #48, GUNSIGHT #49, GUNSIGHT No. 50 and SANTA RITA #29 lodes is identical with the location or amended location as marked on the ground.	
	<b>EXPENDITURES</b>	
	The improvements and the value of the labor and improvements made upon or for the benefit of each of the lode locations embraced in said mining claim by the claimant or its grantors are as follows:	
No. 1	The discovery point of the GUNSIGHT #48 lode is on the lode line, 100. ft. from a point on line 2-3, 299.73 ft. from Cor. No. 2, a post and notice. Value, None	
No. 1	The discovery point of the GUNSIGHT #49 lode is on the lode line, 200. ft. from a point on line 2-3, 294.93 ft. from Cor. No. 2, a post and notice. Value, None	

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FEET	
No. 1	<p>The discovery point of the GUNSIGHT No. 50 lode is on the lode line, 500. ft. from a point on line 2-3, 299.91 ft. from Cor. No. 2, a post and notice. Value, None</p>
No. 1	<p>The discovery point of the SANTA RITA #29 lode is on the lode line, 165. ft. from a point on line 2-3, 301.40 ft. from Cor. No. 2, a post and notice. Value, None</p>
OTHER IMPROVEMENTS	
<p>Access roads traverse the common group of 50 claims, M.S. Nos. 4815, 4816, 4817, 4818 and M.S. Nos. 4820 &amp; 4821 (both unapproved) and provide access to the four lodes of this survey. Claimant herein</p>	
OTHER CORNER DESCRIPTIONS AND SUPPLEMENTAL DATA	
<p>M.S. No. 1297A Coconino lode: Cors. Nos. 1 and 5, the latter identical with Cor. No. 1 of the Oregon Copper lode of the same survey, are monumented with wood posts, 4 x 4 ins. 2 ft. above ground, slightly loose in the stones or ground. The inscribed data is partially identifiable. Line 5-1 was found to be S.79°30'21"W., 503.83 ft. instead of S.79°40'53"W., 503.71 ft. as approved. Lines 1-2 and 4-5 are shown as approved.</p>	
<p>M.S. No. 1297A Oregon Copper lode: Cor. No. 1, identical with Cor. No. 5 of the Coconino lode of the same survey, described above. Cor. No. 4 is monumented with a wood post, 4 x 4 ins., 2 ft. above ground, slightly loose in the stones or ground. The inscribed data is partially identifiable. Line 4-1 was found to be S.79°24'15"W., 542.64 ft. instead of S.79°40'53"W., 543.16 ft. as approved. Lines 1-2 and 3-4 are shown as approved.</p>	
<p>M.S. No. 2444 Excelsior lode: Cor. No. 1 is monumented with a stone, 10 x 14 ins., 4 ins. above ground, firmly set, properly mkd. Cor. No. 3 could not be found. Cor. No. 4 is monumented with a stone, 10 x 12 x 24 ins., loosely set, properly mkd. Line 3-4 is shown as approved. Line 4-1 was found to be N.8°05'11"E., 1,494.61 ft. instead of N.8°0'E., 1,500.00 ft. as approved.</p>	

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M.S. No. 4718 SANTA RITA #26 lode: Cors. Nos. 1 and 2, identical with Cors. Nos. 1 and 4 respectively of the SANTA RITA #29 lode of this survey, described above. Cors. Nos. 3 and 4 are monumented with 3/4 in. pipe with a brass cap, 1 ft. above ground, firmly set, properly mkd. All lines are correct as approved.

M.S. No. 4718 SANTA RITA #27 lode: Cors. Nos. 2, 3 and 4 are monumented with 3/4 in. pipe with a brass cap, 1 ft. above ground, firmly set, properly mkd. All lines are correct as approved.

M.S. No. 4793 LAST CHANCE No 2 lode: Cors. Nos. 1, 2, 3 and 4 are monumented with 3/4 in. pipe with a brass cap, 1 ft. above ground, firmly set, properly mkd. Lines 1-2 and 2-3 are shown as approved. Line 3-4 was found to be N.2°27'45"E., instead of N.2°28'14"E.

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 MEMORANDUM

None

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 FIELD ASSISTANTS

Name	Capacity
Kent D. Miller	Assistant Instrumentman
Eric O'Neil	Rodman-Chainman

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

CERTIFICATE OF SURVEYOR

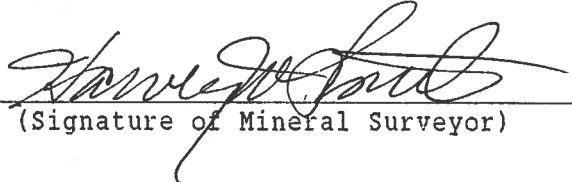
Name of Mineral Surveyor	Date
Harvey W. Smith	February 25, 1991

I HEREBY CERTIFY That in pursuance of an order received from the Arizona State Office, Bureau of Land Management, at Phoenix, Arizona, dated December 19, 1980 and amended January 23, 1989, I have carefully executed the survey of the claims of ASARCO Incorporated, known as the Gunsight #'s 48 and 49, Gunsight No. 50 Amended, and Santa Rita #29 situated in surveyed section 36, Township 18 South, Range 15 East, Gila and Salt River Meridian, in the State of Arizona.

This survey, designated as number 4819, has been executed by me and under my direction and has been made in strict conformity with said order, the Manual of Instructions for the Survey of Public Lands of the United States, and in specific manner described in the foregoing field notes.

I FURTHER CERTIFY That the labor expended and improvements made upon and for the benefit of the Gunsight #'s 48 and 49, Gunsight No. 50 Amended, and Santa Rita #29 lodes location(s) embraced in the said mining claim by claimant(s) or its grantors are fully stated in my report. The character, extent, location, and itemized value are specified in full detail. No portion of, or interest in, said labor and improvements so credited to this claim has been included in the estimate of expenditures upon any other claim.

Scottsdale, Arizona  
(Location)

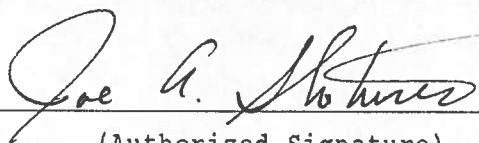
  
(Signature of Mineral Surveyor)

Title 18, U.S.C. section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious, or fraudulent statements or representations as to any matter within its jurisdiction.

## CERTIFICATE OF APPROVAL

Arizona State Office  
Phoenix, Arizona  
March 19, 1991

The foregoing field notes of mineral survey number 4819, in surveyed sections 36, Township 18 South, Range 15 East, Gila and Salt River Meridian, in the State of Arizona, executed by Harvey W. Smith, Mineral Surveyor, under order dated December 19, 1980 and amended January 23, 1989, having been critically examined and the necessary corrections made prior to their certification by the surveyor, the field notes and the survey therein described are hereby approved.

  
\_\_\_\_\_  
(Authorized Signature)

Acting Chief Cadastral Surveyor of Arizona  
(Title)