State Department of Geology and Mineral Industries

702 Woodlark Building
Portland, Oregon

WAITE BARITE PROSPECT — **GALICE DISTRICT**
JOSEPHINE COUNTY

Owner:

The land is owned by Josephine County from which Mr. E.R. Waite has a lease. He also holds a lease on the adjacent timber land.

Location:

The prospect is reached by trail 2½ miles from a point where Rock Creek crosses on the Graves Creek Road. The prospect is about 1200 feet in elevation above the road. It is located in sec. 29, T. 33 S., R. 7 W., Josephine County, in the Galice district. The deposit is approximately 9 miles from a railroad siding at Pollard.

Development:

The outcrop is exposed by several cuts and tunnels. The construction of a road through mountainous country 1 3/4 miles long is required to reach the property.

Geology:

The deposit occurs in a highly altered sheared zone in metavolcanics of Jurassic age. The rocks locally are porphyritic dacites or andesites, which are highly altered. Several hundred feet to the southeast is a series of slates and schists which are crossed when approaching the property from the Graves Creek Road.

The mineralized zone is exposed by several cuts and tunnels

WAITE BARITE PROSPECT (cont.)

indicating a width of about 35 feet. It has a strike of N. 40 E. The shearing planes are nearly vertical.

The mineralization consists of barite, pyrite and quartz. The presence of copper sulphate stains in several cuts indicates the presence of a small amount of copper in the ore - probably as chalcopyrite. One sample of barite containing pyrite assayed .05 gold, 2.80 Ag, and 91.34 percent $BaSO_4$. Development work was not sufficient to indicate the quantity of barite present, but where exposed in cuts it appears to occur in bands several feet thick within the sheared zone. One band exposed in an open cut is about 6 feet thick.

Economics:

The barite exposed appears to be of commercial grade. Its use probably would be limited to oil well-drilling mud and other uses where its dark color is not detrimental. More development work is required to prove the quantity and quality of the ore before its economic value can be fully determined. Present exposures indicate further development work is warranted.

Elton A. Youngberg
January 21, 1945

# # # # # # #

State Department of Geology and Mineral Industries

702 Woodlark Building
Portland, Oregon

WAITE BARITE PROSPECT

January 21, 1945
Josephine County
Galice District

(2) Location: The prospect is reached by trail 2½ miles from a point where Rock Creek crosses on the Graves Creek Road. The prospect is about 1200 feet in elevation above the road. It is located in Section 29, Township 33 S., Range 7 W., Josephine County in the Galice district. The deposit is approximately nine miles from a railroad siding at Pollard.

(1) Owner: The land is owned by Josephine County from which Mr. E. R. Waite has a lease. He also holds a lease on the adjacent timber land.

(4) Geology: The deposit occurs in a highly altered sheared zone in meta-volcanics of Jurrasic Age. The rocks locally are porphoritic danites or andesites, which are highly altered. Several hundred feet to the southeast is a series of slates and schists which are crossed when approaching the property from the Graves Creek Road.

The mineralized zone is exposed by several cuts and tunnels indicating a ~~wealth~~ width of about 35 feet. It has a strike of N.40E. The shearing planes are nearly vertical.

The mineralization consists of barite, pyrite and quartz. The presence of copper sulphate stains in several cuts indicates the presence of a samll amount of copper in the ore—probably as chalcopyrite. One sample of barite containing pyrite assayed .05 gold and 2.80 Ag. and 91.34 per cent $BaSo_4$. Development work was not sufficient to indicate the quantity of barite present, but where exposed in cuts it appears to occur in bands se-

702 Woodlark Building
Portland, Oregon

veral feet thick within the sheared zone. One band exposed in an open cut is about 6 feet thick.

(3) Development: The outcrop is exposed by several cuts and tunnels. The construction of a road through mountainous country 1¾ miles long is required to reach the property.

(5) Economics: The barite exposed appears to be of commercial grade. Its use probably would be limited to oil well-drilling mud and other uses where its dark color is not detrimental. More development work is required to prove the quantity and quality of the ore before its economic value can be fully determined. Present exposures indicate further development work is warranted.

********** **********

E K Lumyberg 1/21/45

WAITE BARITE GALICE JOSEPHINE

STATE OF OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
ASSAY LABORATORIES

REQUEST FOR SAMPLE INFORMATION

The State law governing free analysis of samples sent to State Assay Laboratories requires that certain information be furnished the Laboratory regarding samples sent for assay or identification. A copy of the law will be found on the back of this blank. Please fill in the information called for as completely as possible, and submit it along with your sample. Keep a copy of the information on each sample for your own reference.

Your name in full H. M. Dole

Post-office address P.O. Box 417 - Grants Pass

Are you a citizen of Oregon yes Date on which sample is sent June 23, 1947

Name (or names) of owners of the property T. D. Waite

Name of claim sample obtained from State Land

Location of property or source of sample (describe as accurately as possible below):

County Josephine Mining district Galice

Township 33 S Range 7 W Section 29 Quarter section NW¼

How far from passable road 2½ miles

For what minerals or elements do you wish the sample(s) analyzed Refer to Baldwin
Au, Ag, Cu, Zn, Pb

	Channel (length)	Grab	Pipe	Description
Sample No. 1		x		
Sample No. 2				

IMPORTANT: A vein sample should be taken in an even channel across the vein from wall to wall. Location of sample in the workings, together with the width measured, should be recorded.

(Signed) H. M. Dole

DO NOT WRITE BELOW THIS LINE - FOR OFFICE USE ONLY - USE OTHER SIDE IF DESIRED

Description H.G. 151 is from dump on lower workings by trail.

H.G. 152 is from upper workings a few hundred feet up the hill.

Sample Number	GOLD		SILVER		COPPER	LEAD	ZINC	BARIUM
	oz./T.	Value	oz./T.	Value	Percent	Percent	Percent	Percent
P-6194	0.01		Nil		0.10%	Trace	2.05%	
P-6195	0.19		5.35		0.40%	1.30%	0.55%	52.27%

Report issued _____ Card filed _____ Report mailed _____ Called for _____

SIR-5

ELLA GROUP -

June 8, 1966 - With Mr Fred Jones on a ~~West Fork~~ Goff Creek (Galice Dist) The old Goff Mine is Sec. 29, T. 38S., R. 3W.

Rock of Galice fm. Rogue strike N15°E and dip 50° to 60° W - Jones has an open cut in a N15E trending mineralized zone - probably the Big Yank Ledge or lode - In this cut the zone appears to be about 25' wide.

An old tunnel - has been uncovered - 10' length on right side going in a N25°W ~~shear~~ vein zone is present - 8" of ~~gouge~~ in it - no mineralization to the east of it. - 1 grab sample from face of tunnel - black + white barite + sulfides

Down at the Creek level - at the old Goff Mine - the Big Yank is crosscut by a tunnel that trends N5°W - the ~~Galice~~ Rogue ~~Volcanics~~ have been bleached - and pyrite Jones - 1-2" wide - probably barite impregnated too, 45' long - rocks at face show some mineralization but not heavy.

This may be the Waite Barite - it is listed

1985

ANNUAL PROGRESS REPORT
GOFF PROJECT

JOSEPHINE COUNTY, OREGON

BY

D. R. BOWDEN

AMSELCO EXPLORATION INC.
RENO, NEVADA
FEBRUARY, 1986

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS

LIST OF TABLES

SUMMARY

The report represents a synopsis of four geologists' work and all of the referenced papers should be consulted for a complete understanding of the work completed in 1985. Base and precious metal values at surface and in drilling are shown to be confined to felsic (rhyolite?) pumice tuffs with a variable exhalative component (i.e., silica and barite) in enclosing volcanic and volcaniclastic rocks.

Drilling has shown that significant zinc values increase along strike and down dip from the GOFF adit and in other stratigraphic horizons such as the GOFF barite zone. Additional drilling beneath and south of the GOFF adit is warranted to follow up an intercept of 21' (true width) averaging 2.36% Zn. A 7" intercept of massive sulfide in GFD-1 assaying 38% Zn is interpreted as a clast in an enclosing (overlying?) sedimentary rock.

Rock sampling along the strike of the favorable horizon points to a need for more detailed sampling before new drill areas can be selected. Trenching is seen as the best method for sampling mineralized horizons that may only be 5'-10' thick.

VLF-EM surveys have been sucessful in tracing (mapping) the favorable horizon but have not identified any clasical conductors within the area. Depth penetration is likely less than 100'. A GENIE survey was not successful in identifying conductors at GOFF. Induced Polarization or Pulse E.M. have not been tried as yet.

Recommendations for 1986 are summarized as follows:

1) 3 NX core holes to follow up GFD-1 (1400' total).

2) Detailed (1" = 100') mapping of the entire strike length of the favorable zone.

3) Close spaced trenching and rock sampling of same.

4) Extension of existing soil grids if (3) proves not to be feasible.

5) I.P. test over GOFF Adit drill area and Section 20 Barite Zone. Follow up of resistivity anomalies with Deep Pulse E.M. (DPEM) survey.

6) Follow-up drilling (0-5000') of new anomalies produced by (1)-(5).

A budget of $200,000 (not including geologist's salary) is sufficient to carry out these recommendations.

INTRODUCTION

Several Amselco personnel were involved in the work on the Goff Project in 1985. Diamond drilling (GFD 1-3) in February at the Goff Project was supervised by W. C. Meyers. Trench mapping and sampling at the same time was performed by A. D. Hitchborn. A geological survey (1" = 500') was completed by B. C. Wakeman in April/May and included additional surface sampling. Additional diamond drilling in July (GFD 4-5) was supervised by W. C. Meyers. A final drill hole (GFD-6) and a ground survey were supervised by myself in November/December.

Background information on previous work, land status, and geology are summarized in the 1984 progress report by W. C. Meyers.

LAND STATUS
(Figure 1)

Eleven lode claims were staked during 1985 as additional favorable ground was identified. Fog #29, 30, 39, 40, 49 and 50 are located in the SE 1/4 and NE 1/4, section 19. Hedgehog Extension #1-5 are located in the W 1/2, SE 1/4, section 30. Figure 1 represents the current land status for Goff. The Josephine County leases are still in effect with a $2.50/acre rental on 800 acres due in 1986.

GEOLOGY

The geologic mapping by Wakeman breaks out 4 major lithostratigraphic units in the Rogue Formation and one descriptive unit for the overlying sediments of Galice Formation. Figure 2 is a generalized schematic rendering of the 1:6000 scale map (included in the pocket at the back of the report) with drill hole locations for GFD 1-6. The legend describes a sequence that supposes a west-east younging towards the regional Rogue/-Galice contact, supported by vertically to easterly dipping rocks. Drilling, however, shows that the prominent subsurface dips are westward. This would require the section be overturned to maintain an easterly top direction.

The general distribution of lithologies on the geologic map lends as much support to an eastward younging sequence as the reverse. In fact, the apparent thickening of the AIv unit due west of the GOFF adit (NE 1.4 Sec. 30) suggests that the older rocks would be to the west.

A discussion of lithologies is best accomplished by using the regional breakdown with observations from the drilling where insight and clarification can be added.

BV

Described as Basic Volcanics/basalt flows-similar basic lithologies in core would better fit as dike rock; the singular occurrence is at an unusual contact between FP and AIv.

AIv/AIvs

Acidic to intermidiate volcanics/quartz-sericite-chlorite-pyrite and clhorite tuffs with phyllites and quartzites. The presence of sulfides (5-15%), gossan and barite constitute the change to AIvs, which is the trace of the mineralized horizons. In drill core, the mineralized intervals have the appearance of rhyolitic pumice tuffs with pyrite-sphalerite + galena + chalcopyrite in quartz between flattened pumice fragments. The pumices have small feldspar phenocrysts and 5-15% equant quartz phenocrysts, locally sheared into eyes. Pyrite is the only sulfide seen as phenocryst replacements in the pumice. Sericite/-white mica is a variable constituent in the pumice. Angular clasts of adjacent wall rocks are caught up in the mineralized tuff with sulfide flowage around them. These textures plus small recumbent folds suggest slumping of this and several adjacent units. One or two of the smaller intervals of mineralized tuff and talc-chlorite-pyrite wall rock are thought to represent small (6-8") clasts rather than thin individual beds.

There are chlorite-talc-sericite-pyrite tuffs and/or sediments (locally silicified) plus chloritic and cherty sediments within the drilled section represented by AIv on surface. Some of these rocks are chloritized, silicified and sericitized.

IV

Intermediate Volcanics/probably best termed andesitic tuffs, tuff breccias, thin flows, tuffwackes (wackes of dominantly volcanic composition) and interbedded muds. Some of these lithologies are seen within AIv as a minor component. The quick transition from andesitic tuff/flow to felsic tuff in thin intervals (commonly < 6') may suggest that they are gradational into debris flows that grade into AIV. Several instances were noted where 1"-3" intercepts of weak pyrite-sphalerite mineralization in quartz-sericite tuff could best be interpreted as clasts of AIvs in an andesitic debris flow.

FP

Feldspar Porphyry/ also described by other workers as dacite or latite flows, tuffs and tuff-breccias. Locally silicified and choritized, especially in GFD 2 and 6. Probably contains intrusive rocks of the same composition. Noticeably altered by quartz-epidote-carbonate veining and flooding in drill core and generally to the east of the GOFF adit.

DRILLING

Drilling at GOFF consisted of three phases of activity from February to December. Six BX core holes were drilled for a total of 2618 feet of drilling. Table I summarizes the pertinent drilling data. The general locations of the drill holes are shown in Figures 2 and 2a. Cross sections of the drilling are represented in Figures 3a - 3e.

SURVEYING

A survey was completed in early December 1985, that established seven control stations for future surveying, collar coordinates for GFD 1-6 end around twelve prominant road locations for more detailed plotting. A control point was established at the top of the GFD-6 access road on a hill top for future plane table survey work along the northern strike extension of the GOFF and Barite zones. All surveyed points were plotted at 1:6000 scale by the surveyor and have been transferred to the 1:6000 scale land map which is in the back pocket. In addition, the survey points around the GOFF Adit were plotted at 1:1200 scale. Both original mylar survey maps are in the Reno drafting files.

MINERALIZATION

Figure 2 shows the location of mineralized zones that have been formally named to date and are referred to in this section. Please note that there is a "barite zone" near the GOFF adit as well as the Section 20 Barite zone at the north end of the property.

The GOFF zone was intersected by GFD 1 and 2 but apparently not by GFD-3. There is a strong Cu/Zn soil anomaly east of GFD-3 that may represent the northern extension of the GOFF zone. However, GFD-6 did not intersect the GOFF zone at depth (for whatever reason) after intersecting the Barite zone as planned. Figure 4 is a schematic, vertical, long section, showing relative positions of the GOFF zone intercepts and reported grades. It should be pointed out that the width of the mineralized zone is about five times (5x) that of the significant assays in GFD 1, 2 and possibly 6. The thicker intercept is shown in Figure 3a-b and in Table II, which summarizes the assays for the mineralized zones in the 1985 drilling. The conclusion drawn from the long section is that mineralization should improve downdip from GFD-1 and that the southern extension of the GOFF zone is prospectable.

A second zone (the Barite zone), as intersected in GFD-6, increases in zinc content with depth, although this may only

TABLE I

HOLE	CORE SIZE	DIRECTION	ANGLE	TOTAL DEPTH	*NORTHING	*EASTING	ELEVATION	DATE DRILLED
GFD 1	NQ/BQ	290°	-45°	357'	5398.98	2496.01	2330.8'	2/85
GFD 2	NQ/BQ	260°	-45°	614'	5715.20	2659.53	2395.3'	2/85
GFD 3	BQ	265°	-45°	333'	6029.67	2625.76	2444.5'	2/85
GFD 4	BX	110°	-45°	575'	9177.57	3369.35	2984.7'	7/85
GFD 5	BX	290°	-45°	439'	8709.12	3677.04	2884.3'	7/85
GFD 6	BX	110°	-45°	300'	5715.04	2288.17	2477.8'	11/85

*DATA FROM R. T. REECE - SURVEY, 12/85

TABLE II

COMPILATION OF ASSAY FROM MINERALIZED FELSIC *TUFF UNIT
(* RHYOLITIC PUMICE TUFF)

	INTERVAL WIDTH	%Cu	%Pb	%Zn	oz/t Au	oz/t Ag	%Ba	ROCK TYPE
GFD-1								
130-130.7	0.7	1.54	0.58	38.70	0.054	1.89	0.35	MASSIVE SULFIDE CLAST
142-144	2	1.04	0.08	6.00	0.015	0.26	9.50	POLYMICT BRECCIA
144-147	3	0.19	0.32	2.91	0.009	0.25	8.00	PUMICE TUFF
147-150	3	0.24	0.80	2.36	0.020	0.60	17.00	"
150-152	2	0.02	0.36	0.61	0.022	0.71	4.50	"
155-158	3	0.16	0.06	2.68	0.009	0.15	5.70	"
158-161	3	0.23	0.03	3.68	0.005	0.06	0.40	"
165-168	3	0.10	0.03	1.79	0.008	0.11	1.30	"
168-171	3	0.02	0.02	1.99	0.013	0.13	1.10	"
171-173	2	0.02	0.01	0.48	< 0.005	0.04	0.20	"
183-185	2	0.19	0.01	2.62	< 0.005	0.08	0.20	"
185-187	2	0.13	0.01	1.43	< 0.005	0.10	0.20	"
[142-187]	21*	0.20	0.16	2.36	0.009	0.22	4.47	PUMICE TUFF COMPOSITE
(*21' TRUE WIDTH IN 29' INTERCEPT-NOT INCLUDING 130'-130.7'. *TOTAL INTERCEPT = 45' OR 32' TRUE WIDTH)								
GFD 2								
240-244		0.03	0.04	0.20	0.006	0.29	4.00	PUMICE TUFF
244-248		0.20	0.09	2.33	0.006	0.37	6.50	"
248-252		0.06	0.18	0.72	0.010	0.22	5.50	"
252-254		0.05	0.33	0.82	0.012	0.18	6.60	"
254-257		0.06	0.12	1.18	0.006	0.06	6.00	"
257-259		0.04	0.11	0.64	0.007	0.07	0.80	"
259-262		0.05	0.24	0.42	0.009	< 0.05	0.50	"
262-264		0.12	0.59	1.21	0.010	0.11	0.40	"
264-267		0.05	0.39	0.82	0.009	0.14	3.00	"
267-270		0.03	0.35	0.62	0.009	0.24	5.00	"
270-274		0.02	0.14	0.23	0.009	0.22	5.00	"
274-277		0.01	0.04	0.06	0.019	0.21	4.60	"
277-281		0.02	0.15	0.25	0.035	0.16	4.60	"
[240-281		0.06	0.19	0.72	0.012	0.19	4.28]	COMPOSITE ASSAY
(30' TRUE WIDTH)								

TABLE II p. 2

COMPILATION OF ASSAY FROM MINERALIZED FELSIC *TUFF UNIT
(* RHYOLITIC PUMICE TUFF)

	INTERVAL WIDTH	%Cu	%Pb	%Zn	oz/t Au	oz/t Ag	%Ba	ROCK TYPE
GFD-3	< NO SIGNIFICANT ASSAYS>							
GFD-4								
472-475	3	.02	<.01	0.39	.020	.10	0.2	FELSIC TUFF
475-480	5	.09	<.01	0.41	.013	.08	0.4	"
480-484	4	.04	.02	1.25	.020	.10	0.2	"
484-489	5	.03	<.01	0.23	.013	.04	0.2	"
489-493	4	.14	.03	0 45	.011	.07	0.7	"
495-498	3	.05	.12	1.02	.028	.65	0.1	"
Composite		.06	.02	0.59	.017	.15	0.3	"
GFD-5								
326-330	4	.11	.04	1.08	.035	.29	3.5	FELSIC TUFF
330-334	4	.03	.18	0.55	.058	.30	4.5	"
334-338	4	.29	.01	0.23	.005	.06	0.8	"
353-356	3	.02	.07	0.79	.027	.10	1.8	"
367-371	4	.05	.15	1.50	.065	.75	5.3	"
371-375	4	.10	.25	3.60	.054	.42	5.0	"
375-379	4	.09	.04	1.23	.014	.11	0.8	"
Composite	27	.10	.11	1.28	.040	.29	3.1	"
GFD-6								
79.3-86.6	7.3	.04	<.01	0.97	.003	0.67	0.4	FELSIC TUFF
86.6-97.7	8.1	.30	.59	2.34	.061	1.79	31.4	"

reflect depletion of zinc in the weathering profile. At the present time, the Barite zone is considered to be stratigraphically separate from the GOFF zone. Jackson (1980) mapped the Barite zone as possibly fault-bounded to the north and of unknown extent to the south. At this time, the Barite zone is suspected to continue to the south, possibly merging with the GOFF zone.

A third zone, referred to as the Western (pyrite/barren) zone, is located west of the Barite zone, and can be traced to the north where other barite-pyrite-quartz rocks are found. There is a weak geochemical response in soils along the southern extension of this zone.

The section 20 Barite zone was tested by GFD 4 & 5. The true width intercept approaches 150' in both drill holes, including a 4' intercept of massive pyrite in GFD-4. Zinc values greater than 1% were restricted to the eastern (top?) edge of the unit in GFD-4, but similar grades (1-3% Zn w/.05 opt Au) were encountered on the western edge of the zone in GFD-5. These two holes were not relogged during my work on the property. Meyers (1985) described silicification in the bottom of GFD-5 which could be related to hydrothermal alteration. The spectacular Au values (> 0.30 opt) reported in surface cuts were not encountered in the drilling with intercepts ranging from 0.01 + 0.06 opt Au in GFD-5. Additional drilling will have to follow recommendations based on more surface mapping and geochemical sampling, including examination of additional mineralized zones to the west of GFD 4 and 5.

Geochemistry

Ninety rock samples were collected by Wakeman and Hitchborn which are summarized on the 1:6000 scale geochem overlay in the pocket of this report. In an attempt to determine what the general metal distribution might be along the regional trend, the Cu, Pb, Zn and Ba values were contoured. No regard was given to rock type or degree of weathering. Figures 5a-d are reduced copies of the contour work sheets with drill holes added for orientation purposes. It is concluded that insufficient data exist for a reasonable interpretation of the rock geochemistry.

The soil sample grid established in 1980 was extended south of the GOFF Adit to follow the AIv trend to the southwest. Figures 6a-c are reduced copies of contouring done at 1:6000 scale using contour intervals established in 1980. The earlier anomalies are included to contrast the magnitudes involved. The horizon can be traced along strike for over 1500' using Cu and Zn. There is a moderate Pb and Zn anomaly at the end of the sampling done to date. This soil anomaly is exceptionally stronger than rock sampling values in the same area, especially in terms of lead and zinc.

A weak barium and zinc (rock) trend continues for an additional 1500' southwest of the current soil sampling. Since soil sampling outlined anomalous lead and zinc values in the zone where rock sampling data show only a weak anomaly, the soil grid should be extended to cover this strike length. Additional soil sampling to the north may be useful to try following the possible extention on the GOFF Adit zone north of GFD-3.

GEOPHYSICS

A VLF/EM-16 survey was conducted in February (Bronskill, 1985) between the existing GOFF Adit survey and the section 20 barite occurrence. Figure 8 is a simplified and reduced version of the computer generated contour map of Fraser Filtered VLF data. Anomaly "A" corresponds to the section 20 barite target tested by GFD 4 & 5. Anomalies "E" and "F" appear to lie along the same conductive horizon although they cross geologic boundaries. The change of strike where the two grids come together is unexplained at this time. The suggestion of NNW faulting by topography and drilling may provide an answer, since either NNW or NNE conductors would respond to the Seattle transmitter in a similar manner.

Anomalies "B", "C" and "D" represent sulfide-bearing conductors that have not been drill tested. Bronskill felt that the profiles did not justify linking "C" and "D" together as the contouring shows. Conductor G is unexplained at this time. None of the anomalies are good, classical VLF conductors since the quadrature (out-of-phase) response is always poor.

Ground checking of the VLF anomalies identified gossans and sulfide-bearing lithologies that were previously unknown demonstrating that the VLF is a good tool for prospecting in this terrain.

A GENIE survey was also carried out in 1985 at GOFF but without success. The lower frequencies used by the GENIE (337 - 3037 Hz vs. 22,000 Hz for VLF) did not couple with the sulfides and produced very flat, meaningless profiles. The failure of the GENIE system at GOFF is still not completely understood.

Discussions with a geophysical consultant in January suggest that both I.P. and large loop pulse E.M. systems have the capability to look down 2-400' for conductors. Both techniques have been used by other companies in the Silver Peak-Almeda belt. A test using both systems is recommended for 1986 at GOFF, with at least 1 IP line each over GFD 1 and GFD 5. A PEM survey is desirable if good conductivities are present as it can be effective to depths of 500-1000'.

DISCUSSION

The GOFF property is a polymetallic sulfide target with high precious metal values and a host litholgy that is regionally persistant for over 3 miles. There have been many comments about the similarity of GOFF to Kuroko-type volcanogenic massive sulfide (VMS) deposits. The drilling data support this idea and Kuroko style modelling will aid future exploration at GOFF. At the outcrop scale and in drilling, the mineralized horizons are clearly identifiable as thin (10-100') felsic (rhyolitic to rhyodacitic?) lapilli tuffs that have a variable exhalative component. These horizons are locally dominated by exhalative components, as represented by barite-pyrite zones, where true massive sulfides are encountered. The remainder of the regional host lithology is most likely volcaniclastic sediments with a variable sulfide content, including base metals in small amounts. There is evidence of "stacking" of mineralized zones throughout the property.

The thickest felsic horizon was intersected by GFD 4 & 5 at the section 20 barite occurrence and was not examined in detail by me. "Clasts" of mineralized tuff in chloritic rocks in GFD 1, 2 & 6 are seen as evidence supporting the theory that some "tuffs" are debris flows largely composed of dacitic and andesitic volcanic material with interbeds of sulfidic muds. Silicification logged by Meyers at the bottom of GFD-5 may represent footwall alteration of some kind.

The rather large areas west and east of the mineralized horizon, mapped as "Feldspar Porphyry" or "Latite", may represent dacitic doming and associcated tuffs and tuff breccias. Only regional mapping and additional drilling will answer the question of proximity of the exposed rocks to the main volcanic center(s) and the existance and location of the major hydrothermal vents (i.e., root zones). The evidence seen to date suggests that there has been slumping of the sulfide horizons and that the immediate over-and underlying rocks are largely debris flows in the GOFF adit area. It is possible that future drilling will identify the main sulfide body without locating the felsic center (rhyolite dome) due to post-depositional "tectonic" transport. Likewise, a large sulfide body may be present without the expected hydrothermal pipe in the footwall rocks. These ideas and comments are based on few observations and are recommended for use as one of several working hypotheses.

RECOMMENDATIONS

The work accomplished to date and summarized in this report can be used as a basis for additional work. Broad categories are geology (including drilling), geochemistry and geophysics.

Geology/Drilling

Three (3) additional core holes are proposed for the GOFF Adit area and are shown in Figure 9. Hole "A" will test the Barite zone approximately 150' down dip from the GFD-6 intercept, as well as testing the western "barren" or pyrite zone (Figure 10). Hole "B" (Figure 11) will test the southern strike extension of the Barite zone and test the downdip extension of the GOFF zone as intersected in GFD-1. This will also help clear up the stratigraphic relationship between the Barite and GOFF zones. Hole "B'" is presented as a very poor alternative. Hole "C" & "C'" are proposed as a means to test the southern strike extensions of the GOFF zone. If hole "B" suceeds in favorably tracing the Barite zone, consideration should be given to placing hole "C" far enough west to again test both horizons. The construction of the access roads for hole "C" will aid in the definition of the surface expression of both zones as well. Total projected drilling for this phase is 1400' of NX core, with the larger core size recommended primarily for better recovery and to allow for later down hole geophysical testing. An additional 5000' of NX drilling should be held in contingency for testing targets generated by the other proposed work.

Geology/Mapping

Wakeman (1985) demonstrated that the sulfide-bearing host to the mineralization can be traced over a strike of almost 3 miles. Detailed mapping and drilling show that the mineralized zones are 10 - 30' thick and occur as "stacked" horizons within the thicker +100' acid to intermediate volcanic w/sulfide (AIvs) unit. Detailed mapping (1" = 100') of the entire 3 miles of strike length, with accompanying bulldozer trenching, is recommended for 1986. Measured traverses at regular intervals (1000' ?) should be sampled for slabbing and thin section. Evaluation of the nature of the mineralized horizons and recognition of footwall alteration (i.e. vent areas) will be critical to the understanding of the overall GOFF trend and the selection of drill sites along the strike length.

As control for the detailed mapping and sampling, survey stations established in 1985 can be used with either an alidade or an optical theodolite to cover much of the trend. Use of a laser theodolite may be necessary in several hard to reach areas.

Geochemistry

Continuation of detailed rock sampling and assaying for Cu, Pb, Zn, Au, Ag and Ba will accompany the mapping and will probably identify additional gossans.

Budget

An estimate of contractual costs for the recommended work at GOFF is as follows:

	Cost
Land	
800 acres @ $2.50/acre	$ 2,000.00
Roadbuilding/trenching	
100 hrs. @ $100/hr	$ 10,000.00
Drilling	
GOFF Adit	
3 NX core holes -	
1400' @ $20/foot	$ 28,000.00
Other/undesignated	
10 NX core holes -	
5000' @ $20/foot	$100,000.00
	#128,000.00
Geophysics	
IP & DPEM tests	$ 10,000.00
Geochemistry	
500 rocks @ $20/sample	$ 10,000.00
Support	
Field Assistant	
4 mos. @ 2200/mo.	$ 8,800.00
Vehicles	
10 mos. (6+4) @ 500/mo.	$ 5,000.00
Field Expenses	
200 Days (120+80) @ $50/day	$ 10,000.00
TOTAL	$183,800.00
Contingency	16,200.00
GRAND TOTAL	$200,000.00

The Grand Total of $200,000.00 is a reasonable amount to cover the cost of proposed geological work at GOFF for 1986. As written, the drilling portion represents about 65% of the budget.

Whole rock geochemistry for the major lithologic units identified in the drill core is recommended, especially the pumice tuff and adjacent lithologies within the AIvs.

Geophysics

The VLF coverage should be extended along the southern strike extension of the GOFF zone (8000' of strike). The existing coverage demmonstrates the usefullness of VLF as an aid to mapping. Therefore, an Induced Polarization (IP) test is recommended for the GOFF adit area and the section 20 drill area. The survey should include at least 300' and possibly 400' diapole spacings. In addition, a Deep Pulse Electro-Magnetic (DPEM) survey in the GOFF adit area should be able to match or better the penetration depth of IP (+400') and will not be as sensitive to terrain as the resistivity mode for I.P.

REFERENCES

Bowden, D. R., 1986, Monthly Report for January, 1986, Reno Files.

Bronskill, S., 1985, Results of Geenie Survy at GOFF, Oregon, 6-12-85, Reno Files.

Jackson, P., 1980, Annual Report, GOFF Mine, Josephine Co., California, 9-24,80, Reno Files.

Jackson, P., 1983, Memo to T. Smith, Re: Status of GOFF; 6-24-83, Reno Files.

Jackson, P., 1984, Internal Memo on GOFF Property dated 2-15-84, Reno Files.

Meyers, W. C., 1984, Memo to R. C. Steininger, Re: GOFF Mine, 2-29-84, Reno Files.

Meyers, W. C., 1985, GOFF Monthly Report - March 1985, 3-25-85, Reno Files.

Prochnau, J., 1975, Memo "Waite (GOFF) Barite Occurrence, Silver Peak-Alameda Belt, Josephine County, Oregon", 7-6-75, Reno Files.

Wakeman, B., 1985, Monthly Report - April 1985, 4-24-85, Reno Files.

Wakeman, B., 1985, Monthly Report - May 1985, 5-23-85, Reno Files.

1984
ANNUAL PROGRESS REPORT

GOFF MINE

Josephine County, Oregon

By

W. C. MEYERS

(Amselco Project No. 12-09120)
AMSELCO EXPLORATION INC.
Spokane, Washington
December 1984

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS

SUMMARY

The Goff project lies in Mid-Upper Jurassic calc-alkline, island-arc volcanics in northern Josephine County, Oregon, midway between the Silver Peak and Almeda Mines (Almeda-Silver Peak Belt) in intermediate to acidic volcanics overlain by black slates. The local geologic setting shows northeast-striking, predominantly dacitic tuffs, containing a mappable 1.5-mile-long series of mineralized quartz-sericite-pyrite tuff which contains barite and gossan (after massive sulfide) lenses. Two centers of mineralization are recognized. These occur at the Goff Mine (NW1/4 Section 29) and 3,000 feet to the northeast (NW1/4 Section 20).

Two types of mineralization are present at the Goff Mine: 1) Disseminated to semi-massive pyrite, chalcopyrite, galena, and sphalerite in siliceous or silicified quartz-sericite tuff (10 feet TW at 0.18% Cu, 0.10% Pb, and 0.9% Zn); and 2) Massive barite with disseminated tetrahedrite, sphalerite, galena, and pyrite (5 ft TW at 0.1% Cu, 0.30% Pb, 4.0 oz/ton Ag, 0.10 oz/ton Au). Geophysics and geochemistry indicate that (1) and (2) lie on the same horizon. A comparison with Kuroko-type volcanogenic ore zonation suggests the siliceous or silicified occurrence to represent a vent (proximal) area and the baritic-facies its distal expression.

In Section 20, barite-gossan beds occur at the top and base of a quartz-sericite-pyrite tuff which is correlative with the unit at the Goff Mine. The occurrences are believed distal to a vent area since they lack strong silicification. Up to 1.15% Cu and 0.5 oz/ton Au are present in the gossan.

Drill testing of both areas and detailed geologic mapping of the intervening area is planned for 1985.

INTRODUCTION

In February 1984, the Spokane office was requested to assume responsibility for the Goff project and to review all existing data for the purpose of determining any continued interest in the project by Amselco. Upon reviewing the data package, recommendations were made to proceed with negotiations on the adjacent county leases (begun in 1981) and to drill test in 1985. Subsequently, the county leases were obtained (April 1984) and a brief field visit was made (August 1984) to finalize drill plans. This report will summarize the results of work completed by P. Jackson in 1980-1981, and W. Meyers in 1984.

LOCATION

The Goff project is located in northern Josephine County, Oregon, approximately 20 miles northwest of Grants Pass. The project area covers parts of Sections 20, 29, and 30, T33S, R7W, about 2 miles northeast of the Grave Creek/Rogue River intersection. The property is accessible via the Grave Creek Road from I-5 to Rock Creek, thence 3.5 miles north on logging roads.

PREVIOUS WORK

1900-1960(?). A 75-foot adit and several cuts are excavated, but no production is achieved.

1975. American Selco geologists visit the Goff adit area and recognize similarities with the Almeda deposit, 5 miles south; evidence of interest by competitors and staking of the open ground by a local prospector preclude any interest at that time.

1978. A field visit by H. W. Schull is conducted. Underground and surface sampling show up to 10 feet of 1.0% Zn in the adit, and significant copper, lead, zinc soil anomalies along strike. High gold values are also indicated for barite exposed northwest of the adit in a large open cut.

1979. Three claims are staked by American Selco over the adit and surrounding area after existing claims are abandoned.

1980. Five additional claims are staked after geologic, geophysical, and geochemical work demonstrate the presence of a substantial conductive horizon and strong surface geochemistry. A recommendation to acquire the adjacent county land is made.

1981. All claims are restaked after being declared abandoned by the BLM due to incorrect filing procedures. Negotiations are begun with the county for the adjacent 800 acres.

1982. Assessment work only is performed while awaiting continued negotiations with the county on adjacent ground. Sampling of the barite demonstrates values of 0.10-0.20 oz/ton Au are typical and reproducible.

1983. Assessment work only is performed, consisting of construction of drill roads and pads.

1984. An office review is conducted by the Spokane office and a decision is made to acquire the adjacent county ground. A field visit shows additional barite and gossan to be located north on the county land in Section 20. Plans are made to drill test these targets in 1985.

LAND STATUS
(Figure 1)

The property comprises eight unpatented mining claims in the NW1/4 of Section 29, and an 800-acre lease on Josephine County land in the E1/2E1/2 of Section 29 and all of Section 20. The leases carry a 4% NSR and a $2.50/acre rental in 1985.

AREAL GEOLOGY - ALMEDA/SILVER PEAK BELT

The Goff project area lies in the so-called "western Jurassic belt" of the northern Klamath Mountains, in rocks which are considered to represent calc-alkaline volcanics and volcaniclastics of island-arc origin. Near Grants Pass, the belt consists of two formations: 1) An older Rogue Formation of Mid-Upper Jurassic age (felsic volcanics) on the west; and 2) The younger Galice Formation of Upper Jurassic age (metasediments) on the east. Both occur in an elongate north-south belt 30 miles in length, called the Almeda-Silver Peak Belt.

LOCAL GEOLOGIC SETTING
(Figure 2)

The local geologic setting in Sections 20, 28, and 29, consists of northeast-striking, vertical to east-dipping metavolcanics overlain by black slates and greywackes to the east. A generalized west-to-east section through the metavolcanics shows intermediate to acidic tuffs, overlain by dacitic to felsic tuffs with a mappable horizon of pyritic quartz-sericite tuffs, capped by intermediate flows and tuffs. The volcanics are abruptly overlain by the Galice Formation slates near Rock Creek on the east.

Within the middle unit, the pyritic quartz-sericite horizon is traceable for 1.5 miles and contains base metal and barite mineralization in the NW1/4 of Sections 20 and 29. The pyritic horizon is typically a well-foliated, heavily iron-stained quartz-sericite tuff, which is often cut by quartz veinlets, and is strongly bleached by sulfide weathering. Locally, it is up to 100 feet thick, but may thin rapidly along strike to interbedded quartz-sericite horizons in unaltered light green tuffs.

The mineralization present in the quartz-sericite tuff consists of disseminated to semi-massive copper-lead-zinc sulfides in the tuffs, massive barite lenses containing disseminated copper-lead-zinc sulfides, and massive iron-rich gossan. The two principal areas of mineralization are at the Goff Mine (NW1/4NW1/4 of Section 29 -- barite lenses and disseminated sulfides) and Section

20 barite (barite beds and gossan). Mineral occurrences associated with felsic pyroclastic units occur at the north (Silver Peak) and south (Almeda) ends of the belt, in the Rogue Formation immediately below its contact with the sedimentary Galice Formation. Both deposits consist of massive pyrite-sphalerite-galena-chalcopyrite in silicified and altered felsic pyroclastics, and are volcanogenic in origin. Host rocks, alteration, mineralization, etc., show a strong similarity to classical "Kuroko-type island arc deposits."

The Goff Mine lies immediately below the Rogue-Galice contact, 5 miles north of the Almeda Mine and 12 miles south of the Silver Peak Mine.

GOFF MINE AREA (NW1/4NW1/4, SECTION 29)

(Figure 3a)

GEOLOGY

At the Goff area, the rocks comprise several varieties of volcanics which strike north-northeast and dip steeply east. Three distinct units, each probably consisting of several subunits, are recognized. These are (west to east and youngest to oldest):

1) Well-foliated, intermediate to dacitic tuff with interbedded felsic tuff lenses and beds of phyllitic-tuffaceous metasediments

2) Dacitic to felsic tuff, locally with tuff-breccia, phyllitic tuff, and sericitic-pyrite tuff beds. Sericitic beds are locally silicified with pyrite and contain barite lenses or base metals.

3) Intermediate to dacitic porphyritic flows interbedded with tuffs.

All units have undergone greenschist facies metamorphism and intense weathering, making it difficult to distinguish individual subunits in outcrop.

MINERALIZATION

The mineralization present is of three varieties:

1) Disseminated to semi-massive pyrite seams and lenses with minor sphalerite, galena, chalcopyrite in silicified tuffs and their surface expression as gossanous to heavily iron-stained quartz-sericite schist;

2) Massive barite lenses with disseminated sphalerite, galena, and tetrahedrite(?) along foliation in quartz-sericite-pyrite schists; and

3) Cupriferous ferricrete seeps.

Type 1 occurs at the Goff adit, while type 2 is present in surface trends several hundred feet to the northwest. Geophysics (VLF) suggest they lie along the same stratigraphic horizon. Typical assays from the Goff adit and barite trenches for each type of mineralization are:

		% Cu	% Pb	% Zn	oz/T Ag	oz/T Au
Adit	10-foot-thick zone	0.18	0.10	0.90	0.50	0.05
Barite trench	5-foot-thick zone	0.10	0.30	0.10	4.00	0.10

Type 3, the "copper-rich" ferricrete, is present 700 feet north of the Goff Mine, on the west side of the north-south drainage. Values of 1-1.5% Cu are present in the spongy ferricrete found here.

COMPARISON WITH KUROKO-TYPE MINERALIZATION

There are seven typically recognizable mineral zones in a Kuroko deposit. These are:

Hanging wall		ferrugineous chert	
	syngenetic possibly transported	barite	(monomineralogic)
		Kuroko	(barite-cpy-gal-sph-py)
		Oko	(cpy-py)
	vent area epigenetic	Keiko	(disseminated-stockwork cpy-py usually strongly silicified)
		Sekkoko	(py-gypsum)
Footwall		Footwall	(py with strong silicification)

At Goff, mineralization at the adit (Type 1) is most similar to Keiko in its disseminated nature and strong silicification. At the barite trench, a poorly developed Kuroko zone can be inferred. The intervening Kuroko-Oko zones of massive mineralization are not recognized at the surface.

SOIL GEOCHEMISTRY (Figure 3c)

The results of the 1980 survey indicate the following:

Copper (>200 ppm)

Two areas of anomalous copper are recognized. The first lies east (downslope) of a line connecting the barite-trench and Goff adit, and continues southeast (downslope) for several hundred feet. The second occurs 700 feet north of the adit and is centered near a ferricrete seep located here.

Zinc (>500 ppm)

A broad zinc anomaly is recognized over the entire area between both the Goff Adit and barite and along the strike (north) extension of the Goff adit. A narrower trend, 200 feet west of the barite trench, is also recognized.

Lead (>80 ppm)

The most prominent anomaly is a narrow northwest-trending zone between the Goff adit and barite trench.

Interpretation

Due to the deep weathering present (±100 feet) which has locally produced lateritic conditions, significant dispersion of any primary geochemical halo can be anticipated. This is apparent in comparing copper-lead-zinc anomalous trends in this area. Two trends can be identified: 1) a northwest trend with slightly offset (transported downslope anomalies of copper-lead-zinc between the barite trench and Goff adit; and 2) a trend of zinc ± copper extending from the Goff adit north to the limits of the survey. Both are interpreted as reflecting the presence of volcanogenic sulfides at depth. Since significant dispersal and probable significant leaching is present, the anomalies above are best interpreted as reflecting the presence of underlying mineralization, but not its relative position or intensity.

GEOPHYSICS (Figure 3b)

VLF EM-16 surveys were conducted in 1981 and 1984 over the Goff area along east-west lines spaced at 200-foot intervals (north-south). Two conductive zones were identified by the survey. The strongest zone trends north from the Goff adit for +800 feet in an east-facing, arcuate pattern. It is strongest at the adit and becomes broader (deeper?) to the north. A second trend extends northwest from the first (at a point 200 feet north of the adit) to the vicinity of the barite trench. It is weaker or deeper throughout its length and is unrecognizable several hundred feet northwest of the barite.

Interpretation

The conductors present are interpreted to represent sulfides present in the underlying rock, and not overburden effects or fault zones. Both conductors coincide with observed sulfides at the adit and barite trench, and reflect these occurrences. The rapid decrease in intensity north from the adit area is believed due to deeper weathering associated with an inferred less siliceous nature to the mineralization in that direction, which has resulted in less preservation of the sulfides near the surface. A crude half-width calculation indicates the top of these conductors should be at 80- to 100-foot depths, in agreement with the known depth of weathering in this area.

CONCLUSIONS

The mineralization exposed at the Goff adit and barite trench is similar to Kuroko-type volcanogenic deposits. The mineralization is hosted by a dacitic(?) tuff unit within sub-members of sericite-pyrite and phyllitic tuffs. Disseminated copper-lead-zinc sulfides occur in siliceous sericite tuff (Keiko-type) at the Goff adit, while massive barite with disseminated copper-lead-zinc sulfides (Kuroko-type) in sericite-pyrite tuff occurs several hundred feet northwest. Geochemistry and geophysics suggest both are on the same horizon, while a third horizon extends northward. A working hypothesis for continued exploration would suggest a vent area located near the Goff adit with massive sulfides accumulating northward into a depositional sub-basin. Drilling of the northward geophysical-geochemical trends appears warranted to test this concept within this area.

SECTION 20 BARITE AREA
(Figure 4)

GEOLOGY - MINERALIZATION

The area is underlain by a northeast-striking, west-dipping (presumably overturned) dacitic(?) tuff overlain and underlain by intermediate flows and tuffs. The tuff unit can be further subdivided into a light green, weakly altered tuff and a strongly pyritic altered(?) quartz sericite tuff. The sericitic tuff is a traceable continuation of the quartz-sericite-pyrite units at the Goff mine, and represents the approximate northern limit of this unit. It contains a sulfide-bearing barite bed at its base and a barite-gossan horizon near the top. The tuff is white to gray, heavily iron-stained (after pyrite), and well-foliated. It is thinner, contains less iron stain (pyrite), and becomes less altered (a more light greenish color) to the north, and more altered and thicker to the south.

The observed mineralization occurs as:

1) A white to light gray, thinly laminated barite bed occuring at the base of the quartz-sericite tuff unit with thin (1-3") zones of gossan, varying from 2-4 feet in thickness, and at least 400 feet in length. A 2-foot channel sample at the north end assays 0.25% Cu, 0.13% Pb, 0.05% Zn, 4.3 oz/ton Ag, and 0.58 oz/ton Au.

2) A white to light gray barite bed and thin (3-6") zone of gossan grading northward into a 2- to 3-foot-thick, poorly exposed gossan, occurring at the top of the quartz-sericite unit. Gossan samples from the northernmost exposure assay 0.23-1.15% Cu, nil-0.18% Pb, nil-0.10% Zn, 0.3-3.6 oz/ton Ag, and 0.05-0.43 oz/ton Au. The gossan-barite is exposed for 300 feet along strike.

The observed mineralization is similar to that at the Goff adit-barite trench area, 3000 feet south. It is representative of the Kuroko (copper-lead-zinc-barium) and possibly the Oko (copper $\pm$ lead-zinc) zones of a volcanogenic occurrence.

CONCLUSIONS

The two mineral horizons recognized here occur along the same quartz-sericite-pyrite horizon identified at the Goff Mine, which is continuously traceable between both areas. The occurrences here are considered to represent Kuroko (barium-copper-lead-zinc) and Oko (copper $\pm$ lead-zinc) zones within a volcanogenic deposit. The lack of a siliceous Keiko zone (such as at the Goff adit) further suggests it may be distal to a vent or source area, and hence may be peripheral to a significantly larger or thicker deposit. The rapid thinning of the host quartz-sericite tuff northward, combined with the less intense alteration (and pyrite) in that direction, indicate the best potential should lie downdip or southward. It is considered unlikely that this area and the Goff Mine area were derived from a common vent area, but rather represent two separate centers of mineralization. Drill testing of this zone is obviously warranted.

RECOMMENDATIONS

Field work planned for 1985 will consist of:

1) Drilling of three to four core holes on the identified geophysical conductors in the Goff adit area.

2) Drilling of one to two core holes on the barite-gossan zones in Section 20.

3) Geologic mapping at a 1"=500' scale and rock-chip sampling of the quartz-sericite-pyrite tuff between (1) and (2).

4) Geophysical surveying (EM-16) of the area indicated in (3) along east-west lines spaced at 400-foot north-south intervals.

Field work is scheduled to begin in early February and to be completed by early April. A budget of $80,000 with $50,000 (63%) allocated to drilling is necessary.

BIBLIOGRAPHY

Jackson, P., 1980, In-house Memo on Goff Project Work in 1980

_____, 1983, In-house Memo on Goff Project Status

_____, 1984, In-house Memo on Goff Project Data

Koski, R.A., and Derkey, R.E., 1981, Massive Sulfide Deposits in Oceanic-Crust and Island-Arc Terranes of Southwest Oregon; Oregon Geology, Vol. 43, No. 9, pp. 119-125

Meyers, W.C., 1984, In-house Memo on Recommendation for Work at Goff Mine

_____, 1984, Results of Goff Mine work in 1984 in August Monthly Report

Prochnau, J., 1975, In-house Memo on Visit to Goff Mine

Tatsumi, T., 1970, Volcanism and Ore Genesis, pp. 153-179

AAG - 60
Au,Ag,Cu

Silver values reported on this form are based on current market price of $1.293 per ounce.

ENT OF GEOLOGY AND MINERAL INDUSTRIES
Building - Portland, Oregon 97201

FOR SAMPLE INFORMATION

ysis of samples sent to State Assay Laboratories
urnished the laboratory regarding samples sent for
e law will be found on the back of this blank.
ed completely, and submit it along with your sample.
sample for your own reference.

Grants Pass, Oregon

Please print your name and address in space above

Date sample is sent: 6/9/66

Name of claim sampled: Ella Group (Old Goff Mine)

Name of property owners Fred Jones

Are you hiring labor? No Are you milling or shipping ore? No

Location of property or source of sample. (If legal description is not known, give location with reference to known geographical point.)

County Josephine Mining district Galice

Township 33 S Range 7 W Section 20 Quarter section SW

How far from passable road and name of road 100 yds. Hungry Hill Rd.

	Channel (length)	Grab	Assay for	Description
Sample No. 1		x	Au,Ag,Cu	6" wide zone of Big Yank ledge from face of old tunnel
Sample No. 2				

(Samples for assay should be at least 1 lb. in weight; clay samples for ceramic testing at least 5 lbs.) IMPORTANT: A vein sample should be taken in an even channel across the vein from wall to wall. Location of sample in the workings, together with the width measured, should be recorded.

(Signed) N. V. Peterson

DO NOT WRITE BELOW THIS LINE - FOR OFFICE USE ONLY - USE OTHER SIDE IF DESIRED

Description Mixed barite and sulfides.

Sample Number	GOLD		SILVER		COPPER			
	oz./T.	Value	oz./T.	Value	Cu			
P-31086 AAG-60	0.06	$2.10	1.30	$1.68	0.60%	- -	- -	- -

Report mailed 6-21-66

STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

WAITE BARITE PROSPECT

(GOFF MINE)

Date: January 21, 1945
Josephine County, Galice Dist.
Report by: Elton A. Youngberg

Location: The prospect is reached by trail $2\frac{1}{2}$ miles from a point where Rock Creek crosses on the Graves Creek Road. The prospect is about 1,200 feet in elevation above the road. It is located in Section 29, Township 33S., Range 7 W., Josephine County in the Galice District. The deposit is approximately nine miles from a railroad siding at Pollard.

Note: Portal is in section 29 - main deposit is in section 30.

Owner: The land is owned by Josephine County from which Mr. E. R. Waite has a lease. He also holds a lease on the adjacent timber land.

Geology: The deposit occurs in a highly altered sheared zone in a metavolcanics of Jurrasic Age. The rocks locally are porphyritic dacites or andesites, which are highly altered. Several hundred feet to the southeast is a series of slates and schists which are crossed when approaching the property from the Graves Creek Road.

The mineralized zone is exposed by several cuts and tunnels indicating a width of about 35 feet. It has a strike of N. 40 E. The shearing planes are nearly vertical.

The mineralization consists of barite, pyrite and quartz. The presence of copper sulphate stains in several cuts indicates the presence of a small amount of copper in the ore - probably as chalcopyrite. One sample of barite containing pyrite assayed .05 gold and 2.80 Ag and 91.34 per cent $BaSo_4$. Development work was not sufficient to indicate the quantity of barite present, but where exposed in cuts it appears to occur in bands several feet thick within the sheared zone. One band exposed in an open cut is 6 feet thick, approximately.

Development: The outcrop is exposed by several cuts and tunnels. The construction of a road through mountainous country 1-3/4 miles long is required to reach the property. (There is now a logging road to the occurrence)

(GOFF MINE)

Economics: The barite exposed appears to be of commercial grade. Its use probably would be limited to oil well drilling mud and other uses where its dark color is not detrimental. More development work is required to prove the quantity and quality of the ore before its economic value can be fully determined. Present exposures indicate further development work is warranted.

* * * * * * * * * * * * * * * * ** * * * * * *

AMSELCO EXPLORATION INC.

MEMORANDUM

TO: W. C. Meyers **DATE:** 7-07-86

FROM: S. M. Sutherland SMS

SUBJECT: Goff Project Update

INTRODUCTION

Due to your directive to depart for Alaska Project Assignment on July 8, time does not allow for the completion of a summary report on the Goff Prospect, hence this memo shall serve as an update of activities since the 6/23/86 monthly report. In summary, GFD-11 was completed to a depth of 550' on 6/26 with site reclamation (water bar roads) completed on all county and BLM lands by 6/27. All other work on the prospect was terminated on 6/27, activities from then until July 7 shall be spent putting Goff files in order and preparing for Alaska departure.

PROJECT WORK

DRILLLING

GFD-10:

Assay results have been received from drill core samples with the chalcopyrite mineralized intervals from 264 - 267 and 386 - 388 containing the highest copper and gold grades intersected in the 1986 drilling program.

			[oz/ton]		[- ppm -]			
SAMPLE	FOOTAGE	TRUE WIDTH	Au	Ag	Cu	Pb	Zn	Ba
10688	264-267	1.9'	0.01	0.058	1.66%	27	89	930
10702	386-388	1.53'	0.058	0.20	2.42%	43	500	1915

Even though these mineralized widths are thin (< 2') it does prove the existance of semi-massive sulfide mineralization at Goff that approaches ore grades. Recommendations for additional testing in the GFD-10/Trench #2 area would be to drill offset holes (200' along strike) to the north and south with the source or vent area believed to be to the north (SMS June Monthly Report).

Discussions with Mike Strickler (Litho Logic Resources) concerning the hematite/jasper breccia, located west of pyrite mineralization in GFD-10, indicated that the hematite breccia at Turner/Albright is always in the footwall or laterally equivalent to massive sulfide mineralization. If this is also true at Goff then the jasper breccia stringer mineralization logged in GFD-10 lies in the footwall with upsection to the east.

GFD-11 (Section 20 Barite):

GFD-11 was completed to a depth of 550' and successfully tested the northern extention of the VLF anomaly associated with GFD-4 mineralization yet intercepted only minor (5%) pyrite in chlorite/sericite tuffs from 280 - 284'.

GFD-11 Summary:

FROM	TO	ROCK TYPE
10	263	Feldspar + quartz porphyry (dacite?) intrusive.
263	265	Shear zone @ contact.
265	315	Foliated chlorite/sericite tuffs with variable chert/hematite banding. 5% pyrite 280 - 284'.
315	550 TD	Massive dark grey to maroon basalts, locally epidote altered or amygdule rich.

The GFD-11 log coupled with recent geologic mapping in the Section 20 Barite area indicate the presence of an east-west trending fault between GFD-4 and GFD-11. This structure separates a basic volcanic sequence footwall (west) of sulfide mineralization in GFD-11 from a tuff/sediment section in GFD-4 that contains only minor basic volcanics. Whether this fault is pre or post mineralization it does not matter - it still forms a northern boundary to the Section 20 mineralized trend.

The obvious potential for the Section 20 Barite area now lies along the untested block of ground south of GFD-5 possibly as far as +2000' to GFD-10/trench 2.

Soil Sampling

The soil grid within Section 30 has been expanded (SMS June Monthly Report) to lines 36, 40, 44, and 48+00S with samples collected at 100' intervals from B.L. to 2500 W. Samples were submitted to Sparks Lab 6/30 with results expected early in week of 7/07 - 7/11.

EM-16 Survey

EM-16 Survey data was collected along lines 36+00S (by SMS) with an extension of the previously defined "South Goff Zone" located at the western end of line 36+00S. Another NE trending anomaly was located due east of the short adit located at line 40+00S - 17 W and presumably represents a subparallel sulfide bearing horizon. The EM-16 anomaly near line 40+00S - 10W lies near the feldspar porphyry contact and may represent a fault zone(?).

The last two lines (44+48+00S) were not completed due to the need to stop work at Goff and prepare for Alaska.

Strickler has indicated that the Pulse-EM system has worked very successfully in defining massive sulfide pods at the Turner/Albright property and may be a useful tool at Goff.

FILE DATA

All files are either brought up to date or in the process thereof. Most data contained within the Goff File box are originals and should be copied to the main files before reviewed by any other parties.

Maps requested by J. Cooper for the JV proposal presentation include:

1) Geology
2) Drill Hole Locations
3) Soil Grid Survey Area
4) Rock Samples
5) VLF Survey Summary
6) Trenching

These maps should be drafted on 8 1/2" x 11" or 11" x 17" format in summary form. One good regional geology map with the Almeda - Silver Peak trend outlined is in Joe Kizis June Monthly Report.

Attachments:

1" = 500' Geology w/Drill Holes and Trenches
1" = 500' VLF/EM-16 Fraser Filter Plot
GFD-10 Cross Section-Trench #2 Area-updated
1" = 100' Geology Section 20 Barite Area
1" = 100' EM-16 summay Section 20 Barite Area-updated
GFD-11 Cross Section

File: Goff Prospect July Monthly Report

10.15/21

1986 REFERENCE LIST - GOFF

For complete list of internal Amselco Exploration Reports see 1985 Annual Progress Report - D. R. Bowden February, 1986

Albers, J. P., et al, A Special Issue Devoted to Massive Sulfide Deposits, West Shasta, California: Economic Geology, December, 1985.

Derkey, R. E., 1982, Geology of the Silver Peak Mine, Douglas County, Oregon: PhD Thesis, University of Idaho, Moscow, Id.

Garcia, M. O., 1976, Petrology of the Rogue River Area, Klamath Mountains, Oregon: Problems in the Idenitification of Ancient Volcanic Areas: UCLA PhD Thesis.

Helming, B. H., 1966, Petrology of the Rogue Formation, SW Oregon: MS Thesis, University of Oregon, Eugene, Oregon.

Libbey, F. W., 1967, The Almeda Mine, Josephine County, Oregon: Oregon Department of Geology and Mineral Industries Short Paper #24.

Omoto, H., and Skinner, B. J. (Editors), 1983, The Kuroko and Related Volcanogenic Massive Sulfide Deposits: Economic Geology Monograph #5.

Ramp, L., and Peterson, N. V., 1979, Geology and Mineral Resources of Josephine County, Oregon: Oregon Department of Geology and Mineral Industries, Bulletin 100.

Smith, J. G. Page, N. J., Johnson, M. G., Moring, B. C., Gray, F., 1982 Preliminary Geologic Map of the Medford 1° x 2° Quadrangle, Oregon and California: USGS OFR 82-955.

Sutherland, S. M., 1986, March-April-May-June Monthly Reports, Internal Amselco Exploration Reports.

Wells, F. G., and Walker, G. W., 1953 Geology at the Galice Quadrangle, Oregon: Oregon Department of Geology and Mineral Industries Map.

CRIB MINERAL RESOURCES FILE 12

RECORD IDENTIFICATION
- RECORD NO..... M013711
- RECORD TYPE..... XIM
- COUNTRY/ORGANIZATION. USGS
- FILE LINK ID..... CONSV
- DEPOSIT NO..... OOGMI 100-14
- MAP CODE NO. OF REC..

REPORTER
- NAME..... LEE, W
- DATE..... 74 01
- UPDATED..... 81 02
- BY..... FERNS, MARK L. (BROOKS, HOWARD C.)

NAME AND LOCATION
- DEPOSIT NAME..... GOFF MINE Waite Baite
- MINING DISTRICT/AREA/SUBDIST. GALICE
- COUNTRY CODE..... US
- COUNTRY NAME: UNITED STATES
- STATE CODE..... OR
- STATE NAME: OREGON
- COUNTY..... JOSEPHINE
- DRAINAGE AREA..... 17100310 PACIFIC NORTHWEST
- PHYSIOGRAPHIC PROV..... 13 KLAMATH MOUNTAINS
- LAND CLASSIFICATION..... 41

QUAD SCALE	QUAD NO OR NAME
1: 62500	GALICE

LATITUDE	LONGITUDE
42-40-49N	123-33-37W

UTM NORTHING	UTM EASTING	UTM ZONE NO
4725250.	454100.	+10

- TWP..... 33S
- RANGE.... 07W
- SECTION.. 29
- MERIDIAN. W.M.

ALTITUDE.. 2250 FT

POSITION FROM NEAREST PROMINENT LOCALITY: NW1/4 NW1/4

MAIN COMMOD..... AJ CU
MINOR COMMOD.... AG BA

ORE MATERIALS (MINERALS,ROCKS,ETC.):
PYRITE, BARITE

EXPLORATION AND DEVELOPMENT
STATUS OF EXPLOR. OR DEV. 2

DESCRIPTION OF DEPOSIT

DEPOSIT TYPES:
SHEAR ZONE, VOLCANOGENIC
FORM/SHAPE OF DEPOSIT:

SIZE/DIRECTIONAL DATA
SIZE OF DEPOSIT..... SMALL
MAX WIDTH..... 35 FT

DESCRIPTION OF WORKINGS
SURFACE AND UNDERGROUND

COMMENTS(DESCRIP. OF WORKINGS):
TWO SHORT TUNNELS

PRODUCTION
NO PRODUCTION

GEOLOGY AND MINERALOGY

AGE OF HOST ROCKS..... QUARTZ
HOST ROCK TYPES..... METAVOLCANICS

LOCAL GEOLOGY
NAMES/AGE OF FORMATIONS,UNITS,OR ROCK TYPES
1) NAME: ROGUE VOLCANICS
AGE: JUR

GENERAL REFERENCES
1) RAMP, L. AND PETERSON, N.V., 1979, GEOLOGY AND MINERAL RESOURCES OF JOSEPHINE COUNTY, OREGON; OOGMI BULL. 100
45P