# State Department of Geology and Mineral Industries

1069 State Office Building Portland 1, Oregon Coos County Coquille Dist.

### BELL GRAPHITE PROSPECT

Owners: W. L. Bell, Keith Bell, and wives, Myrtle Point, Oregon.

Area: The land in  $W_2^1$  of Sec. 32,  $SE_4^1$  Sec. 31 and  $E_2^1$   $NE_4^1$  Sec. 31,

T. 30 S., R. 11 W., is privately owned by the Bells.

Location: The prospect is located at a log landing at the end of a logging road about 200 yards south and slightly west of the \( \frac{1}{4} \) corner between Secs. 29 and 32, i.e., NE\( \frac{1}{4} \) NW\( \frac{1}{4} \) Sec. 32, T. 30 S., R. 11 W., at about 1,150 feet elevation. The prospect is reached via the Powers highway to a point on the north side of South Fork Coquille River about 1 mile north of Powers, then up the Woodward Creek Road for about 4 miles. It is just over the divide into the Myrtle Creek drainage.

History: The owners having obtained a spectrographic analysis from a California firm showing "95 plus percent carbon silicon and other elements" became interested in marketing their material as a natural mixture of clay and graphite for foundry use. They wished to incorporate to help finance development of the deposit.

<u>Development work:</u> The occurrence is exposed by a shallow bulldozer cut at the west edge of the log landing.

Geology: Some graphitic material occurs in a shear zone between a pebbly sandstone to the south and fossil-bearing siltstone to the north. appears to The zone/strikes about N. 70° E.(X) and dips steeply NW. The zone is up to 40 feet wide and composed of a clayey gouge with occasional small lenses of graphitic material (in part quartz nodules coated by graphitic material). Some lenses of green chert are exposed in the southern portion of the cut. Fossils in the muddy sandstone or siltstone to the north are a dwarf

variety possibly in part forams. Their identity has not been established, but the rock appears lithologically similar to part of the Umpqua formation. The pebbly sandstone to the south appears lithologically similar to either the Umpqua or Tyee formation. Chert found within the shear zone could have worked its way up from the underlying Dothan formation.

A small amount of similar appearing graphitic material occurs as float about 1 mile southwest on the west fork of Woodward Creek in the SE<sup>1</sup>/<sub>4</sub> Sec. 31. A fairly large body of chert is exposed west of the west branch of Woodward Creek. The chert is in part overlain by the pebbly Eocene(?) sandstone.

An analysis of the graphitic material (sample P-24784) contained 1.06 percent carbon (graphite), 58.14 percent SiO<sub>2</sub>, and 25.20 percent R<sub>2</sub>O<sub>3</sub> (other oxides). Most of the carbonaceous material volatilized at a low temperature when tested in the furnace (see letter by Hollis M. Dole to W. L. Bell 12/15/59).

<u>Visited</u>: 8/6/60 with Walt Foster, W. L. and Keith Bell. <u>Report by</u>: Len Ramp 9/9/60.

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## 2033 First Street Baker, Oregon

# STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES 1069 State Office Building Portland 1, Oregon

239 S.E. "H" Street Grants Pass, Oregon

### REQUEST FOR SAMPLE INFORMATION

The State law governing analysis of samples by the State assay laboratory is given on the back of this blank. Please supply the information requested herein fully and submit this blank filled out along with the sample.

Your name in full W. L. Bell	tou dapartment shott m
Street or P.O. Box Box 206	City & State Myrtle Point, Oregon
Are you a citizen of Oregon? Yes Date on which	sample is sent 11-18-59
Name (or names) of owners of the property	ecop an ita barebone ed
Are you hiring labor? Are you milling	ng or shipping ore?
Name of claim sample obtained from	outhe and actional on
Location of property or source of sample (If I give location with reference to know County Coos Minim	legal description is not known, own geographical point.)
Township 30 S. Range 11 W. Section	
How far from passable road?Na	
Channel (length) Grab Assay for	
Sample no. 1 Graphite	The market
Sample no. 2	ent theirs your moresque to est individual to
Sample no. 2 (Samples for assay should be	at least 1 pound in weight)
edt yd bestelling ou san i (Signed)	
DO NOT WRITE BELOW THIS LINE - FOR OFFICE USE	
Sample Description Tale with black carbonaceous	material on grain surfaces.
**************************************	RBON SILICA OXIDES
number oz./T. Value oz./T. Value C	
2-24784 1.00	06% 58.14% 25.20%
Report issued Card filed Rep	port mailed 12-15-59 Called for

# PRELIMINARY EXAMINATION OF WESTERN CARBON GRAPHITE OCCURRENCE

By

Walter A. Foster

Registered Professional Engineer
Examination made August 6, 1960

REGISTERED PROFESSIONAL

Engineer

4193

Walter A. Foster Oregon

Oct. 4, 1957

WALTER A FOSTER

#### WESTERN CARBON GRAPHITE OCCURRENCE

A preliminary examination was made of the Western Carbon graphite occurrence on August 6, 1960, in the company of W. L. Bell, Keith Bell, and others.

#### LOCATION

The graphite occurrence is located approximately three miles East of Powers, Oregon, and is accessible by gravel and dirt roads. The exposure is in a logging operation landing on the east side of a small ridge in the East 1/2, of the Northeast 1/4, of the Northwest 1/4, of Section 32, Township 30 South, Range 11 West, W.M.

#### OWNERSHIP

Mr. W. L. Bell, Keith Bell and wives were reported to have deeded title to 560 acres of land as follows: (West 1/2 Section 32, Southeast 1/4 Section 31, and East 1/2 of the Northeast 1/4 Section 31, all in Township 30 South, Range 11 West.)

Western Carbon interest's are held by W. L. Bell and wife, Keith Bell and wife, and Irvin Pearce.

A deeded right of way from the property to the county road at Bridge, Oregon, is also held by the Bells.

#### GEOLOGY

The graphite occurs in small nodules and lenses in a shear zone of grey to greenish blue clay. This zone, where exposed in the logging operation landing is 45 to 50 foot wide, striking North 70° East, and the apparent dip is to the North about 65°. An inclusion of grey green chert similar to the Dothan Formation cherts is exposed in the shear zone.

To the south of the shear zone a gritty sandstone is exposed which is lithologically similar to the Eocene Arago or Umpqua Formation, and to the north a rock formation which is olive colored sandy mudstone containing small marine fauna and is similar to Cretaceous sandy siltstones. The strike is easterly and the apparent dip is to the north.

#### MINERALOGY

The graphite occurs in small nodules and lenses in the clay shear zone (Location #1 on enclosed map). The nodules when broken open contain quartz veinlets with some calcite crystals. The graphite covers the clay with a thin coating as the bulldozer worked through the cut making the graphite appear more widespread than it actually is.

Float material similar in appearance was seen approximately one mile to the southwest (Location #2 on map).

As far as could be determined from the single exposure, the graphite is of carbonaceous origin. The analytical results and ash tests show only a very small amount of Carbon (1.33%). This would indicate that the graphite appearing material is the result of a part of a small seam of coal being pulled into the shear zone during faulting. The MgO indicates that talc is present in the material thus giving the soft greasy feeling.

#### ANALYSES

Approximate twenty pounds of hand selected graphitic material was selected from the cut. This was analyzed as follows:

Carbon	1.33
SiO2	57.20
Al203	7.40
Fe <sub>2</sub> 0 <sub>3</sub>	7.20
CaO	2.60
Mg0	4.60
Sulfur	0.10
L.O.I.	7.12
Moisture	3.01

#### CONCLUSIONS AND RECOMMENDATION

The analytical work on a selected sample of the best available material shows only a very small amount of graphitic carbon.

To be of commercial value the ore mined should yield at least one ton of 50% rough carbon concentrates to three tons of ore.

The following is from Engineering and Mining Journal industrial minerals prices: Graphite, Mexican, amorphous, f.o.b. shipping point, \$15 to \$19 per metric ton (2204 pounds). The Mexican graphite occurs in beds up to 24 ft. thick and the main vein averages 80 per cent graphitic carbon.

There is no indication that additional work should be done on the property for the exploration or development of graphite.

RAMP C

ANALYSIS REPORT  To Ho W. Hard HANNA NICKEL SMELTING CO. Chemical Riddle, Oregon Quantometer.						
Lab. No.	Sample Description	191-98				
	Bell Graphil					
	The age of					
196						
	¥					
	Carbon	1.33				
	5.02	57.20				
	alr O3	7.40				
	7e203	7.20				
	CaO	2.60				
		4.66				
	Sulfar	0.10				
	h.O.I.	7.12	-7			
			Q.			
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	Maritans	3.01	dry Basis how about her l'			
manager statement and a position as a contract of	1.0/3/4/-	90 56				
		10-72				
Date 8	15-65		Signed Frie allo			

POPM NO. ON RECO.