Bepartment of Commerce and Labor COAST AND GEODETIC SURVEY E. Lester Jones Superintendent. State: alaska. DESCRIPTIVE REPORT. Joh. Sheet No. 3715 Port Chatham Cook Inlet. 1918

DESCRIPTIVE REPORT.

To accompany Topographic Sheet A Port Chatham, Cook Inlet, Alaska. (surveyed August, 1918.)

Eoline R. Hand, Hyd. & Geod. Eng'r. Chaef of Party.

The bight between Claim and Kelp Points had already been surveyed, but on a 1:10000 scale. This shows it in more detail and also supplies the missing shoreline in the H.E. end of lagoon, and west of Claim Boint; indicated by dotted lines on chart Mo.8588. I can think of no information regarding the terrain beyond that indicated on the sheet.

The primery purpose of the survey was to furnish information for vessels coming in to the dock of the mine people. Whitney and lass are working a chrome proposition here, and from all indications have enough ore in sight to warrant operations for a number of years. They have been blasting out ore from several holes at different times, but just now are mining out on the reef at the topographic station called "mine". I think shortly they will have removed this entire islet down to extreme low water line. The tramway shown from beach to cliff is being extended up into the hill: track is also being laid out to the wharf. So far only the ore-bearing rock is being shipped: but as this is an expensive proposition the company is installing a stamp mill (which will be seen at junction of tracks at base of cliffs) so that they may be able to ship only the "concentrates".

There is an excellent wharf with 16 feet along side, and the water has been dragged up to it; so there is no reason why steamers may not come up to it, if the tide is right. However it is not advisable to remain there, if there is any weather coming, as there is no room for manegvering. It would seem advisable to have a mooring buoy in the centre of the harbor, in line(say) with the east edge of the wharf, so a vessel may run a line to it from her starboard quarter: then a steamer backing out rould be enabled to tail up into the deep water toward north end of cove until her bow cleared the dock and headed out. Otherwise a single screw boat, sure to back to port, might get into the shoal water that is off the point south of wharf.

I established a range and a beacon for approaching this wharf. They are described on the sheet, and in the list of positions and "landmarks" list. It might at first be thought the range is too close to the covering and uncovering rock off the beacon, but I regard it as being in the best position. As the the rock, there is deep water close to. The range carries a vessel over the soundings of greatest depth and well off the shoal mentioned in preceding paragraph as making out from point. The range has been dragged close to the pottom.

I issued in the field a blueprint chart of this locality, last August. The original tracing is now with the Inspector at Seattle.

The buildings shown are all the property of the mining company, and more will doubtless becerected, as the place grows. I look for a small settlement here shortly,; the management expects this and have already named the place "Chrome" and intend to ask for a post-office, when the size warrants. A small general store is now maintained by the company.

Chromium is an element, and is more or less known for its property of hardening steel, which virtue has special application just now in the manufacture of munitions, as hardening gun linings, etc. It occurs in nature as the oxide, and always in conjunction with iron, in the proportion of two parts iron to one of chrome. It is black, and noticably heavy, and is found stratified with the yellow rock in varying proportions. The "concentrate" resembles black sand, and is obtained by running the pulverized rock over watered belts, from which it is separated by gravity. It is worth over \$100.00 a ton. At present all this ore goes from this mine to P ittsburg.

P.S. Signals E. end sheet located for wire drag work. E.R.H.

Und & Cood From Land.

## PLANE TABLE POSITIONS

For Topographic Sheet"A", Port Chatham, Alaska.

Surveyed in August, 1918.

Eoline R. Hand, H.& G.E. Chief of Party.

ROCK" Whitewashed rock beacon in the bight between Kelp and claim Points. On starboard hand then entering to the wharf of whitney and Lass Chrome mine.  ANGES- Forward	59-12	787 1070	151-48	750 202	Height 4 ft.	Remarks
claim Points. On starboard hand then entering to the wharf of thitney and Lass Chrome mine.	50.40	1070		202		
then entering to the wharf of thitney and Lass Chrome mine.	50.40		}			
hitney and Lass Chrome mine.	60.40		,	1	1 1	
hitney and Lass Chrome mine.	50.10		1	[		
ANGES- Forward	60.40					
	59-12	1229	151-49	459		
		. 628		493		
Back	59-12	1259	151-49	491		
Ranges established for th	1 -	598		461		
pproach to above wharf.	[	770	· ·		1 1	
Diamond targets painted white,	i .	Ì	l			
bout 5 1/2 ft. square, 41 meters	<b>{</b>					
part. The line determined by	{					
hese ranges should pass 142 m.					•	
rom "Rock" on S.W. side.						
DIKE" The highest point, in-	59-12	924	151-48	66	20-30 ft.	
hore side, of great grass topped		933	-01-10	886	1.000	
ock or islet 300 m. N.E. of	1	500		1000	1 1	
elp Point.						
BLUFF" A whitewashed symbol	159-12	209	151-49	163	10-15 ft.	
en on most easterly part of		1648		789		
laim Point, at the south end			1	1		
f the high cliffs.						
POINT A whitewashed spot on	59-12	546	151-49	199	10-15ft	
ocky point, W. of Claim Pt. and		1311		753		
etween it and the wharf.	1					
		{				
		•				
the line determined by these	[		1	j	}	
range marks should pass 142 M.	1	1		1		
from station "Rock" on bearing of N46W(true)						
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