

Oregon Black sand Exploration

Hole No. SE

Sabulien Property

Sheet 1 of SE

Sec 32 T27S R14W
County Coos

Hole No. SE Location SE corner of
Sabulien prop.
Elev. of collar _____ (ground elev.)
Thickness overburden 0
Thickness of ore lens 2'
Elev. bottom ore lens _____
Depth of hole 7'
Elev. bottom of hole _____
Elev. water table 0
Nature of bedrock Brown pit

Drill used 1 1/4" Empire
Driller Nichols Co. _____
Engr. in charge Paulson
Mtrl. classified by _____
Sampler _____
Date hole begun 7/20/41
Date hole finished 7/20/41
Shifts actually drilled _____
Diam. casing 1 1/4" Diam. shoe 1 1/4"
Theoretical vol. per ft. this hole _____

Depth			Sample								Remarks
From	To	Cased To	Core Rise	Vol. Wet	Wt. Dry	Cr ₂ O ₃	TiO ₂	Fe	P	SiO ₂	
				45							
<u>0</u>	<u>3.0</u>	<u>3.0</u>		<u>0.85</u>	<u>3.27</u>	<u>4.3</u>					<u>Black sand</u>
											<u>Bottomed in Pit</u>

OK

Oregon Black Sand Exploration Hole No. ME
Sahulien Property Sheet 1 of ME
Lagoons Sec 22 T27S R14W
 County Clatsop

Hole No. ME Location Middle hole at East end of Sahulien Prop.
 Elev. of collar _____ (ground elev.)
 Thickness overburden 0
 Thickness of ore lens 27.5
 Elev. bottom ore lens _____
 Depth of hole 28.5
 Elev. bottom of hole _____
 Elev. water table 0
 Nature of bedrock Black Peat

Drill used 1 1/2" Empire
 Driller Nichols Co. _____
 Engr. in charge Paulsen
 Mtrl. classified by Paulsen
 Sampler _____
 Date hole begun 7/17/41
 Date hole finished 7/19/41
 Shifts actually drilled 2
 Diam. casing 1 1/2" Diam. shoe 1 1/2"
 Theoretical vol. per ft. this hole _____

Depth			Sample									Remarks	
From	To	Cased To	Core Rise	Vol. Wet	Wt. Dry	Cr ₂ O ₃	TiO ₂	Fe	P	SiO ₂	Sample #		
0	10	10		¹² 0.056	3.14	3.84					1?	Grey Black Sand	
10	15	15		¹² 0.074	3.20	0.05					2?	"	
15	20	17	¹² 0.019	3.14	0.16	partially calc. see 0091					3?	"	
20	25	25		¹⁶ 0.113	4.26	0.16					4?	"	
25	28.7	23.5		²⁷ 0.070	3.34	0.28					5✓	"	
To			To 11 ft.										Bottom on Peat.
								3.84			✓		
								108			✓		
											ME		

2✓

OREGON Black Sand Exploration

Hole No. 1E (NE)

Sheet 1 of 1E

Schullien Property

Lagoons

Sec. 32 T 275R 14 W

County Coos

Hole No. 1E Location NE cor. of Schullien prop.

Drill used 1 1/2" Empire

Driller Nichols Co.

Engr. in charge Paulsen

Elev. of collar _____ (ground elev.)

Mtrl. classified by _____

Thickness overburden 0

Sampler _____

Thickness of ore lens 13

Date hole begun 2/17/41

Elev. bottom ore lens _____

Date hole finished 2/19/41

Depth of hole 13

Shifts actually drilled 1

Elev. bottom of hole _____

Diam. casing 1 1/2" Diam. shoe 1 1/4"

Elev. water table -3'

Nature of bedrock Peat

Theoretical vol. per ft. this hole _____

Depth			Sample										Remarks
From	To	Cased To	Core Rise	Vol. Wet	Wt. Dry	Cr ₂ O ₃	TiO ₂	Fe	P	SiO ₂			
0	10	10	-3'	.0038	2.31	0.33						1 Grey with black sands	
10	13	13		.0019								2 Bottomed in Peat	

OK

Oregon Black Sand Exploration

Hole No. 55W
Sheet 1 of 55W

Schulien Property

Sec. 32 T27S R14W
County Cook

Hole No. 55W Location SW corner of Schulien property

Drill used 1 1/2" Empire casing

Driller Nichols Co.

Engr. in charge Paulsell

Elev. of collar _____ (ground elev.)

Mtrl. classified by Paulsell

Thickness overburden 0

Sampler Paulsell

Thickness of ore lens 7.6'

Date hole begun 7/30/41

Elev. bottom ore lens _____

Date hole finished 8/24/41

Depth of hole 7.6'

Shifts actually drilled 2 hrs

Elev. bottom of hole _____

Diam. casing 1 1/2" Diam. shoe 1 3/4"

Elev. water table 1'

Nature of bedrock Drum peat

Theoretical vol. per ft. this hole _____

Depth			Sample								Remarks	
From	To	Cased To	Core Rise	Vol. Wet	Wt. Dry	Cr2O3	TiO2	Fe	P	SiO2		
0	7.6	2.0		2.14	1.14	10.53						Gray and Black inter stratified - Black at surface

O.K.

Oregon Black Sand Exploration Hole No. NSW
Schulien Property Sheet 1 of NW
 Sec 22 T275 R14W
 County Coos

Hole No. NSW Location NW corner of Schulien property Lagoon
 Elev. of collar _____ (ground elev.)
 Thickness overburden 0
 Thickness of ore lens 7.5
 Elev. bottom ore lens _____
 Depth of hole 7.5
 Elev. bottom of hole _____
 Elev. water table 0
 Nature of bedrock Brown peat

Drill used 1 1/2" Empire
 Driller Nichols Co. _____
 Engr. in charge Paulsen
 Mtrl. classified by _____
 Sampler _____
 Date hole begun 8/20/41
 Date hole finished _____
 Shifts actually drilled 2 hrs
 Diam. casing 1 1/4" Diam. shoe 1 1/4"
 Theoretical vol. per ft. this hole _____

Depth		Cased To	Core Rise	Vol. Wet	Wt. Dry	Sample					Remarks
From	To					Cr2O3	TiO2	Fe	P	SiO2	
0	7.5	7.5		0.1670	10.76	16.04					Black Sand

OK

Oregon black sand Exploration

Hole No. 11
Sheet 4/11

Property _____

Sec. 32T 273R 14/11
County _____

Hole No. 11 Location _____

Drill used Emerson hand drill

Driller _____ Co. _____

Engr. in charge _____

Elev. of collar _____ (ground elev.)

Mtrl. classified by _____

Thickness overburden _____

Sampler _____

Thickness of ore lens _____

Date hole begun 6/4/41

Elev. bottom ore lens _____

Date hole finished 6/15/41

Depth of hole 32.3

Shifts actually drilled _____

Elev. bottom of hole _____

Diam. casing 4" Diam. shoe 4"

Elev. water table _____

Theoretical vol. per ft. this hole _____

Nature of bedrock _____

Depth			Sample									Remarks
From	To	Cased To	Core Rise	Vol. Wet	Wt. Dry	Cr2O3	TiO2	Fe	P	SiO2		
22.2	22.2	24.6	.5	0.068								dark gray sand
23.3	24.1	25.2	.9	0.068								
24.1	24.5	24.4	.4	0.068	25.4	12.4						
24.5	25.3	25.8	.8	0.068								11. " "
25.3	25.3	25.3		0.068								
26.1	26.1	26.1		0.068								
26.1	27.5	27.2	1.1	0.068								24. " "
27.5	27.7	27.4	.3	0.068								dark gray sand
27.7	27.7	27.7		0.068								dark gray sand
27.7	28.0	27.2	.7	0.068								dark gray sand
28.0	27.5	27.5	.5	0.068								dark gray sand
27.5	28.5	27.7	1.0	0.068								dark gray sand
28.5	29.0	31.7	2.7	0.068								dark gray sand
29.0	29.0	31.7	2.7	0.068								dark gray sand
30.0	30.6	31.5	1.5	0.068								dark gray sand
30.6	31.0	31.7	1.1	0.0342								dark gray sand
31.0	31.0	31.7	.7	0.068								dark gray sand
31.7	32.0	32.1	.4	0.0342								dark gray sand
32.0	32.3	32.1	.3	0.0342			4.2					dark gray sand
32.3												

Comp

O.K.

11.7

Oregon black sand Exploration
Schubert Property

Hole No. 11
 Sheet 1

Sec. 33 T 27 S R 14 W
 County Oregon

Hole No. 11 Location _____

 Elev. of collar _____ (ground elev.)
 Thickness overburden _____
 Thickness of ore lens _____
 Elev. bottom ore lens _____
 Depth of hole _____
 Elev. bottom of hole _____
 Elev. water table _____
 Nature of bedrock _____

Drill used Empire hand drill
 Driller _____ Co. _____
 Engr. in charge _____
 Mtrl. classified by _____
 Sampler _____
 Date hole begun _____
 Date hole finished 6/5/41
 Shifts actually drilled _____
 Diam. casing 4" Diam. shoe 4"

Theoretical vol. per ft. this hole 0.073567

Depth			Sample								Remarks
From	To	Cased To	Core Rise	Vol. Wet	Wt. Dry	Cr2O3	TiO2	Fe	P	SiO2	
0.0	1.6	1.6									dark grey sand with laminated grey and black sand "
1.6	4.1	1.6-4.1									
4.1	4.2	4.1-4.2	.5								
4.2	4.2	4.7-4.8	.2	0.065		20.9					
4.2	5.6	4.8-5.5	.2	0.068							
5.6	5.6	5.8-5.9	.3	0.065							
5.6	5.2	5.9-6.3	0.0	0.065							
5.2	6.3	6.4	0.0	0.0342							
6.2	7.5	6.4-7.5	.2	0.065							
7.5	7.5	7.5-7.5	0.0	0.065							
7.5	7.5	7.5-7.5	.2	0.065							
7.5	9.1	9.5-9.5	.2	0.065							
9.1	1.0	9.5-9.4	.5	0.065							
9.1	8.3	7.4-7.7	.7	0.065							
8.3	10.9	9.7-9.8	0.0	0.065							
10.9	9.4	9.8-10.3	.6	0.065		13.9					
9.4	10.6	10.3-10.3	0.0	0.065							
10.6		10.3-10.7	1.0	0.065							
10.7	9.8	10.7-10.7	.9	0.065							

OK

Oregon black sand Exploration
Schulze Property

Hole No. 11
 Sheet 2 of 11

Sec. 32 T 27 SR 14 W
 County Clatsop

Hole No. 11 Location _____

 Elev. of collar _____ (ground elev.)
 Thickness overburden _____
 Thickness of ore lens _____
 Elev. bottom ore lens _____
 Depth of hole _____
 Elev. bottom of hole _____
 Elev. water table _____
 Nature of bedrock _____

Drill used Empire hand drill
 Driller Allen Co. _____
 Engr. in charge Trigg
 Mtrl. classified by _____
 Sampler _____
 Date hole begun 2/3/41
 Date hole finished 6/5/41
 Shifts actually drilled _____
 Diam. casing 4" Diam. shoe 4"
 Theoretical vol. per ft. this hole _____

Depth		Sample										Remarks
From	To	Cased To	Core Rise	Vol. Wet	Wt. Dry	Cr ₂ O ₃	TiO ₂	Fe	P	SiO ₂		
9.8	9.1	10.7	.9									gray sand
9.1	10.6	10.7-11.7	.7	0.068								"
10.6	9.5	11.7-11.7	.7	0.068								"
9.5	11.3	11.7-11.7	.7	0.068								"
11.3	11.3	11.7-11.7	0.0	0.068								"
11.3	11.3	11.7-11.7	.6	0.068								"
13.6	13.6	13.7-13.7	.7	0.068								"
13.6	13.6	13.7-13.7	.7	0.068								"
13.6	11.1	13.7-13.7	0.0	0.068								"
11.1	11.1	13.7-13.7	2.5	0.068								"
13.7	12.4	13.7	1.5	0.068								"
12.4	14.1	13.7	.7	0.068								"
14.1	13.2	13.7-13.7	0.0	0.068								"
13.2	14.5	13.7-13.7	.1	0.068								"
14.5	13.6	13.7-13.7	.3	0.068		9.1						"
13.6	15.7	16.3	.7	0.068								"
15.7	15.7	16.3	.8	0.068								"
15.7	15.7	16.3	1.1	0.068								"
15.7	15.7	16.3	1.4									"

O.K

Exploration Hole No. 12
Property Sheet 1
 Sec. T R R
 County

Hole No. 2 Location

 Elev. of collar _____ (ground elev.)
 Thickness overburden _____
 Thickness of ore lens _____
 Elev. bottom ore lens _____
 Depth of hole _____
 Elev. bottom of hole _____
 Elev. water table _____
 Nature of bedrock _____

Drill used 6
 Driller Co. _____
 Engr. in charge _____
 Mtrl. classified by _____
 Sampler _____
 Date hole begun _____
 Date hole finished _____
 Shifts actually drilled _____
 Diam. casing 4" Diam. shoe _____
 Theoretical vol. per ft. this hole _____

Depth			Sample									Remarks
From	To	Cased To	Core Rise	Vol. Wet	Wt. Dry	Cr2O3	TiO2	Fe	P	SiO2		
1.0	1.4	4.0	2.0	1025	77	0.67						
1.4	2.5											
3.5	4.2											
4.2	5.5	5.6	2.0									
5.5	5.5	5.5	1.0									
5.5	7.0	7.2	2.0									
7.0	7.0	7.6				barren						
7.0												

OK

Oregon Black Sands Exploration

Hole No. 9

Sheet 1 of 2



Sandwich Property

Sec. 32 T 27S R 14E

County Coos

Hole No. 9 Location _____

Drill used Hand drill

Driller James Co. _____

Engr. in charge _____

Elev. of collar _____ (ground elev.)

Mtrl. classified by _____

Thickness overburden _____

Sampler Jettison

Thickness of ore lens _____

Date hole begun 5/21/41

Elev. bottom ore lens _____

Date hole finished 1/2/41

Depth of hole 19.7

Shifts actually drilled _____

Elev. bottom of hole _____

Diam. casing 4" Diam. shoe 4"

Elev. water table 0.9

Theoretical vol. per ft. this hole _____

Nature of bedrock _____

Depth			Sample								Remarks
From	To	Cased To	Core Rise	Vol. Wet	Wt. Dry	Cr2O3	TiO2	Fe	P	SiO2	
0.0	0.0		0.4	0.068	17.2	13.0					dark grey sand
3.2	3.4		0.4	0.068							dark grey sand
5.4	7.2	9.	0.4	0.068		13.5					with a little
7.7	8.7	9.9	0.9	0.068							"
8.7	8.7		0.2	0.068							"
8.7	8.8		0.3	0.103	2.50	18.9					"
8.8	9.3	9.7	0.3	0.068							"
7.2	10.0	11.2	0.7	0.068		14.9					"
10.0	11.8	12.2	1.8	0.068							"
11.8	12.0	12.1	0.2	0.068							"
12.4	12.4		0.4	0.068	30.	12.7					"
12.4	13.6	14.	0.2	0.068							dark grey sand
13.6	12.6	14.	0.6	0.068							"
12.6	11.2	14.	1.0	lost		12.7					"
12.6	13.1	14.8	0.3	0.068							"
13.1	12.7	14.7	1.6	0.103							"
12.7	14.0	15.	0.2	lost							"
14.0	14.9	15.2	0.2	-							"
14.9	15.2	15.6	0.7	lost							"

OK

Oregon black sand Exploration
Sublimation Property

Hole No. 10
 Sheet 1 of 1

Sec. 32 T. 23 R. 54
 County Seas

Hole No. 10 Location _____

 Elev. of collar _____ (ground elev.)
 Thickness overburden _____
 Thickness of ore lens _____
 Elev. bottom ore lens _____
 Depth of hole 10.7
 Elev. bottom of hole _____
 Elev. water table 1.7
 Nature of bedrock _____

Drill used Empire hand drill
 Driller _____ Co. _____
 Engr. in charge _____
 Mtrl. classified by _____
 Sampler _____
 Date hole begun _____
 Date hole finished 6/31/41
 Shifts actually drilled _____
 Diam. casing 4" Diam. shoe 4"
 Theoretical vol. per ft. this hole 0.0735 cu ft

Depth		Cased To	Core Rise	Vol. Wet	Wt. Dry	Sample					Remarks
From	To					Cr ₂ O ₃	TiO ₂	Fe	P	SiO ₂	
0.0	1.0				4.02	12.8					1 Grey sand
1.0	1.7										Blacksand laminated with
1.7	2.7	(loss due to sinking casing)									Block and grey sand
2.7	4.5	4.2-5.5		0.068	13.56						becoming grayer at base
4.5	5.7	6.2-6.5	0.0	0.068		16.1					9
5.8	6.3	6.2-6.6	0.8	0.068							Grey sand
6.3	8.2	6.9-8.2	0.1								Grey sand
8.2	9.3	8.3-9.3		0.068	7.26						
8.4	9.3	8.3-9.3		0.068	5.1						3
9.3	9.5	9.3-9.3		0.342							
9.5	9.9	9.3-9.3		0.342							laminated with
9.9	10.7	10.3-10.7		0.342							dark sand
10.0	10.7	10.7-10.7			5.88	2.8					4
10.7											6 in Part.
											(10.4%)

OK