

2000, New River  
...  
...  
...  
...

Hole #24a<sup>✓</sup> - 5, 6, 7

#20a<sup>✓</sup> - 3, 4

#19<sup>✓</sup> - 7, 8, 9, 10, 11, 12, 13, 14

#21A<sup>✓</sup> - 5, 6, 7, 8, 9, 10, 11, 12, 13, 14

#27 - 3, 4, 5<sup>✓</sup>

#19a<sup>✓</sup> - 5, 6, 7

Refuge Mine

Hole #1 - 1, 2, 3

Hole #2 - 1, 2

Last Chance or Lost Mine

Channel Sample

Chickamin Mine

Channel Sample - 7.0'

South Slough  
E 1/2 SW 1/4 Sec 36 T24N R14W

Samples 5, 6 and 7 of hole 19a  
were sent to get a check on  
whether the overlying sand contains  
any appreciable amount of chromite

HOLE #16 - 6/11/41 FROM 00 TO 26.0 WITH HAND AUGER. 26.0 TO 39.5 WITH  
EMPIRE HAND DRILL. 39.5 TO 51.7 WITH MARSHFIELD HAND DRILL

6/16/41 6/17/41

6/18/41

HOLE #18 - 6/11/41 FROM 00 TO 13.0 HAND AUGER 13.0 TO 23.6 EMPIRE HAND DRILL  
23.6 TO 26.6 WITH MARSHFIELD DRILL

HOLE #21 - 6/23/41 FROM 00 TO 10.6 WITH HAND AUGER 10.6 TO 38.0 WITH  
EMPIRE HAND DRILL 38.0 TO 42.2 WITH MARSHFIELD HAND DRILL

6/23/41 6/24/41 6/25/41 6/26/41 7/3/41

HOLE #22 - 7/5/41 00 TO 10.0 WITH HAND AUGER 10.0 TO 15.4 WITH  
EMPIRE HAND DRILL.

HOLE #23 7/5/41 00 TO 17.3 WITH HAND AUGER. 17.3 TO 38.8 WITH  
EMPIRE HAND DRILL 38.8 TO 41.8 WITH MARSHFIELD HAND DRILL

7/5/41  
7/7/41  
7/8/41  
7/9/41

HOLE #25. 7/10/41 00 TO 9.0 HAND AUGER FROM 9.0 TO 33 EMPIRE  
HAND DRILL 33.0 TO 38.0 MARSHFIELD HAND DRILL

7/9/41 7/11/41 7/12/41

HOLE #24. 7/7/41 00 TO 12.0 HAND AUGER 12.0 TO 13.2 MARSHFIELD

HOLE #26 7/14/41 00 TO 10.2 WITH HAND AUGER 10.2 TO 23.5 EMPIRE DRILL  
23.5 TO 32.7 MARSHFIELD HAND DRILL

7/14/41 7/16/41 7/17/41

HOLE #27A 00 TO 18.0 WITH HAND AUGER 7/15/41 7/16/41 7/18/41

HOLE #16.S. 7/14/41 00 TO 10.2 WITH HAND AUGER 10.2 TO 25.0 WITH  
MARSHFIELD HAND DRILL

HOLE #27. 7/16/41 00 TO 22.0 WITH HAND AUGER 22.0 TO 39.0 WITH  
EMPIRE HAND DRILL 39.0 TO 42.1 WITH MARSHFIELD DRILL

7/15/41 7/16/41 7/18/41

HOLE #15 7/18/41 00 TO 10.0 WITH HAND AUGER 10.0 TO 20.0 WITH  
MARSHFIELD HAND DRILL

HOLE #19A - 7/19/41 00 TO 11.0 WITH HAND AUGER 11.0 TO 38.5 EMPIRE  
DRILL 38.5 TO 48.3 MARSHFIELD

7/19/41 7/21/41 7/22/41 7/23/41

HOLE #19 7/24/41 FROM 00 TO 15.0 HAND AUGER 15.0 TO 30 EMPIRE HAND DRILL  
30.0 TO 39.6 MARSHFIELD DRILL 7/24/41 AND 7/25/41

HOLE #21A - 7/26/41 00 TO 15.0 HAND AUGER 15.0 TO 39.2 EMPIRE DRILL  
39.2 TO 50.3 MARSHFIELD HAND DRILL

7/26/41 7/28/41 7/29/41

HOLE #26A 00 TO 20.0 WITH HAND AUGER 8/4/41 8/5/41  
30 - 42.3 with small Empire.

OREGON BLACK SAND Exploration Hole No. 19A  
SHEPARD Property Sheet \_\_\_\_\_  
 Sec. 16 T R  
 County COOS

Hole No. 19A Location \_\_\_\_\_  
 \_\_\_\_\_  
 Elev. of collar \_\_\_\_\_ (ground elev.)  
 Thickness overburden 29.7  
 Thickness of ore lens 6.0  
 Elev. bottom ore lens \_\_\_\_\_  
 Depth of hole 48.3  
 Elev. bottom of hole \_\_\_\_\_  
 Elev. water table \_\_\_\_\_  
 Nature of bedrock BLUE CLAY SAND

Drill used EMPIRE HAND DRILL  
 Driller BURGES Co. \_\_\_\_\_  
 Engr. in charge GRIGGS  
 Mtrl. classified by GRIGGS  
 Sampler HASH AND MILLER  
 Date hole begun 7-19-41  
 Date hole finished 7-23-41  
 Shifts actually drilled 3 1/2  
 Diam. casing \_\_\_\_\_ Diam. shoe \_\_\_\_\_  
 Theoretical vol. per ft. this hole \_\_\_\_\_

Sample #	Depth		Cased To	Sample								Remarks	
	From	To		Core Rise	Vol. Wet	Wt. Dry	Cr2O3	TiO2	Fe	P	SiO2		
# 1	0.0	5.0											YELLOW SAND
" 2	5.0	10.0								47.7			" "
" 3	10.0	15.0								37			BLUE SAND
" 4	15.0	20.0								47.7			GRAVEL AND CLAY
" 5	20.0	25.0								35			" "
" 6	25.0	30.0								40.7			" "
" 7	30.0	35.0								35			" "
" 8	35.0	39.7	43.8	1.5	02394								GRAY SAND AND SOME BLACK SAND
" 9	39.7	41.3			00654						97.1		GRAY & BLACK SAND
" 10	41.3	42.5			0416								" "
" 11	42.5	44.0	44.2										" "
" 12	44.0	45.2	44.5		0855			116.9			95.9		" "
" 13	45.2	46.7	46.6	5.3	113						97.8		" "
" 14	46.7	47.7	47.2	7.4	140						107		CLAY & SAND
" 15	47.7	48.3	47.9		00654								" CLAY GRAVELY SAND

Copy ✓  
 Calc. ✓

OK

OREGON BLACK SAND Exploration Hole No. 19

SHEPHARD Property Sheet

Sec. 16 T R  
County COOS

Hole No. 19 Location \_\_\_\_\_  
Elev. of collar 142.4 (ground elev.)  
Thickness overburden 30.0 FEET  
Thickness of ore lens \_\_\_\_\_  
Elev. bottom ore lens \_\_\_\_\_  
Depth of hole 39.6  
Elev. bottom of hole \_\_\_\_\_  
Elev. water table \_\_\_\_\_  
Nature of bedrock YELLOW CLAY

Drill used EMPIRE HAND DRILL  
Driller BIRKHOLT Co. \_\_\_\_\_  
Engr. in charge GRIGS  
Mtrl. classified by GRIGS  
Sampler HASH  
Date hole begun 7-24-41  
Date hole finished 7-25-41  
Shifts actually drilled 2  
Diam. casing 4 INCH Diam. shoe \_\_\_\_\_  
Theoretical vol. per ft. this hole \_\_\_\_\_

From	To	Cased To	Core Rise	Vol. Wet	Wt. Dry	Sample						Remarks	
						Cr2O3	TiO2	Fe	P	SiO2	Sample #		
1	0.0	5.0										1	DIRT AND SAND
2	5.0	10.0										2	" "
3	10.0	15.0										3	RED SANDY CLAY
4	15.0	20.0										4	" "
5	20.0	25.0										5	RED SAND
6	25.0	30.0										6	BLACK SAND
7	30.0	31.4	30.6		4.92	4.90						7	" "
8	31.4	32.6	31.3	0.1710	7.23	6.33						8	" "
9	32.6	33.7	31.6	0.1358	5.8	11.93						9	" "
10	33.7	35.0	32.6	0.1358	6.62	9.78				132.5		10	" "
11	35.0	35.9	33.6	0.1026	4.82	11.72				137.0		11	" "
12	35.9	36.8	33.8	0.1358	5.74	6.33				130.0		12	" "
13	36.8	38.0	35.9	0.1358	6.60	3.76				122.9		13	" "
14	38.0	39.4	36.4	0.2012	6.32	6.95				125.2		14	YELLOW CLAY AND GRAVEL
15	39.4	39.6	36.7										
			37.2										
			38.0										
			38.7										
			39.4										
			39.8										

Copy ✓  
Calc. ✓

~~NO CORRECTION~~



OREGON BLACK SAND Exploration

Hole No. 21A

Sheet 191

SHEPARD Property

Sec. 16 T R

County COOS

Hole No. 21A Location \_\_\_\_\_

Drill used EMPIRE HAND MILL

Driller BURGESS Co. \_\_\_\_\_

Engr. in charge GRIGGS

Elev. of collar \_\_\_\_\_ (ground elev.)

Mtrl. classified by \_\_\_\_\_

Thickness overburden \_\_\_\_\_

Sampler MILLER

Thickness of ore lens \_\_\_\_\_

Date hole begun 7-26-41

Elev. bottom ore lens \_\_\_\_\_

Date hole finished 7-28-41

Depth of hole \_\_\_\_\_

Shifts actually drilled 2 1/2

Elev. bottom of hole \_\_\_\_\_

Diam. casing \_\_\_\_\_ Diam. shoe \_\_\_\_\_

Elev. water table \_\_\_\_\_

Nature of bedrock \_\_\_\_\_

Theoretical vol. per ft. this hole \_\_\_\_\_

Sample No.	Depth		Cased To	Core Rise	Kgm		Sample					Remarks
	From	To			Vol. Wet	Wt. Dry	Cr2O3	TiO2	Fe	P	SiO2	
	0.0	5.0										
	5.0	10.0										
	10.0	15.0										
# 1	15.0	20.0	19.6									GRAY SAND & BLUE CLAY
" 2	20.0	25.0	25.1									" "
" 3	25.0	30.0	30.6									" "
" 4	30.0	35.0	35.0									BLUE CLAY AND SOME BLACK SAND
" 5	35.0	38.2	38.0		0.782	1.26	0.00				83.1	" "
" 6	38.2	39.6			1.205	2.78	0.00				82.2	GRAY SAND AND BLACK SAND
" 7	39.6	41.1			1.109	1.54	1.32				85.7	" "
" 8	41.1	43.3	43.8		1.109	3.84	0.47				110.5	" "
" 9	43.3	44.6	43.9		1.108	4.34	0.47				107.8	" "
" 10	44.6	45.7			1.108	2.8	0.68				104.6	" "
" 11	45.7	47.5			1.116	3.3	0.00				113.4	Black " "
" 12	47.5	48.4	48.4		1.145	3.1	0.00				118.3	" "
" 13	48.5	49.5	48.7		1.150	6.0	0.00				114.1	" "
" 14	49.5	49.3	49.3			0.98	0.99	(?)			112.9	" "
					Comp.	Wt. of 94.6	Assay	0.4				GA

copy ✓  
Calc ✓

10.7  
30.7  
39.8  
10.7









OREGON BLACK SAND

Exploration

Hole No. 25

SHEPARD

Property

Sheet 1

Sec. 16

T. 3

R. 3

County COOS

Hole No. 25 Location \_\_\_\_\_

Drill used EMPIRE HAND DRILL

Driller BIRKHOF

Engr. in charge \_\_\_\_\_

Mtrl. classified by \_\_\_\_\_

Sampler MILLER

Date hole began 7/2/41

Date hole finished 7/11/41

Shifts actually drilled 3

Diam. casing 4-2-2

Diam. shoe \_\_\_\_\_

Theoretical vol. per ft. this hole \_\_\_\_\_

Elev. of collar 29.0 (ground elev.)

Thickness overburden 8 FEET

Thickness of ore lens \_\_\_\_\_

Elev. bottom ore lens \_\_\_\_\_

Depth of hole 38.0

Elev. bottom of hole 5 FEET

Elev. water table \_\_\_\_\_

Nature of bedrock SAND AND CLAY

	Depth		Cased		Vol. Wet	Wt. Dry	Sample					Remarks
	From	To	To	Rise			Cr2O3	TiO2	Fe	P	SiO2	
# 1	0.0	5.0	RISE									Dirt & SAND
" 2	5.0	10.0	CASED TO									" "
" 3	10.0	15.0										" "
" 4	15.0	20.0										" "
" 5	20.0	25.0										RED SAND
" 6	25.0	29.0										AND BLACK SAND
" 7	29.0	30.8		29.4	222	9.92		0.9			99	" "
" 8	30.8	31.6	0.07	30.0	184	5.53		0.6			99.3	" "
" 9	31.6	32.6	0.09		654	0.80		0.3			100.8	" "
" 10	32.6	34.5	0.08		445	1.14		4.35	3.6		115.7	" "
" 11	34.5	36.0	0.04	37.2	178	5.50		4.0			112.6	" "
" 12	36.0	37.0	1.4	37.7	753	0.82		1.7	4.4		93.7	" "
" 13	37.0	38.0		37.9	542	1.89		0.2			89.9	SAND AND CLAY
							Estimated					
							Average 10 & 11 = 4.3					
							R. 32.6-37.0 = 4.35					
							D 105					

Copy ✓  
Calc. ✓

O.K.

OREGON BLACK SAND Exploration

Hole No. 26

Sheet 1 of 1

SHEPARD Property

Sec. 16 T R

County COOS

Hole No. 26 Location \_\_\_\_\_

Drill used EMPIRE HAND DRILL

Driller BIRKHOFF Co. \_\_\_\_\_

Engr. in charge G. RIGGS

Mtrl. classified by \_\_\_\_\_

Elev. of collar \_\_\_\_\_ (ground elev.)

Sampler MILLER

Thickness overburden \_\_\_\_\_

Date hole begun 7-31-41

Thickness of ore lens \_\_\_\_\_

Date hole finished 7-16-41

Elev. bottom ore lens \_\_\_\_\_

Shifts actually drilled 2 AND 1/2 HALF

Depth of hole 32.7

Diam. casing 4 INCH Diam. shoe \_\_\_\_\_

Elev. bottom of hole \_\_\_\_\_

Elev. water table 27.0

Theoretical vol. per ft. this hole \_\_\_\_\_

Nature of bedrock BEACH GRAVEL

Depth		Sample										Remarks
From	To	Cased To	Core Rise	Vol. Wet	Wt. Dry	Cr <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	Fe	P	SiO <sub>2</sub>		
0.0	5.0											YELLOW SAND
5.0	10.2											" "
10.2	15.2											BLACK CLAY AND DARK SAND
15.2	20.4	20.4										" "
20.4	24.0	23.5										" "
24.0	25.3	25.2										SAND AND GRAVEL
25.3	29.6	29.7										" "
29.6	32.7	32.8										SMALL BEACH GRAVEL

No Assay

Oregon Black Sand Exploration

Hole No. 26A

Sheet 1 of 26A

Shepard Property

Sec. 16 T27S R14W

County Coos

Hole No. 26A Location 75 E of 25  
in line with 26.

Drill used 2" Empire Drill

Driller Burgess Co.

Engr. in charge Griggs

Elev. of collar \_\_\_\_\_ (ground elev.)

Mtrl. classified by \_\_\_\_\_

Thickness overburden 40'

Sampler Earl

Thickness of ore lens 3.6

Date hole begun 8/2/41

Elev. bottom ore lens \_\_\_\_\_

Date hole finished 8/6/41

Depth of hole 43.6

Shifts actually drilled 3

Elev. bottom of hole \_\_\_\_\_

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

Elev. water table 20

Theoretical vol. per ft. this hole \_\_\_\_\_

Nature of bedrock Blue Clay

Depth			Sample								Remarks	
From	To	Cased To	Core Rise	Vol. Wet	Wt. Dry	Cr2O3	TiO2	Fe	P	SiO2		sample #
0		5										Black Dirt Red Clay
5		10										Red Clay
10		15										"
15		18										"
18	23	38.3										"
23	28	38.7										"
28	33	39.3										Gray Sand
33	38	40.5										" "
38	39	40.8										" "
39	40	40.0		0.2394	11.6	5.64				108.710		Black Sand
40	40.8	40.0		0.1710	7.6	7.27				110.911		" "
40.8	42.0	41.0		0.3736	12.4	7.73				111.013		" "
42.0	43.0	41.8		0.1026	4.7	7.26				110.513		" "
43.0	43.6	43.6		0.0252	7.0	4.04				108.514		" "
												Composite 2.6 ✓ Blue Clay - Shale
												(110)

Copy ✓  
Calc ✓

OR



OREGON BLACK SAND Exploration

Hole No. 27

SHEPARD Property

Sheet 1

Sec. 16 T R

County COOS

Hole No. 27 Location SHEPARD  
PROPERTY

Drill used EMPIRE HAND DRILL

Driller BIRKHOFF Co.

Engr. in charge GRIGGS

Mtrl. classified by GRIGGS

Sampler MILLER AND HASH

Date hole begun 7/16/41

Date hole finished 7-18-41

Shifts actually drilled 2

Diam. casing 4 7/8 Diam. shoe

Elev. of collar (ground elev.)

Thickness overburden 37-6

Thickness of ore lens

Elev. bottom ore lens

Depth of hole 42.1

Elev. bottom of hole

Elev. water table 32.2

Nature of bedrock SAND + GRAVEL

Theoretical vol. per ft. this hole

Depth		Sample											Remarks
From	To	Cased To	Core Rise	Vol. Wet	Wt. Dry	Cr <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	Fe	P	SiO <sub>2</sub>	sample No		
0.0	5.0												GRAY SANDY DIRT
5.0	10.0		Rc.	37.6	Density			11.8					" "
10.0	15.0				Assay			6.8					" "
15.0	20.0												YELLOW SAND
20.0	25.0												" "
25.0	29.0												" "
29.0	32.4												" "
32.4	37.6												" "
37.6	39.1	38.4		0.855	2.89	2.10				103	9		YELLOW SAND WITH BLACK SAND
39.1	39.6	39.0		0.0513	1.76	5.69				112.3	10		YELLOW AND BLACK SAND
39.6	40.3	39.6		0.664	2.30	9.17				123.2	11		"
40.2	41.4	40.3		0.445	1.40	9.39				106.9	12		"
41.4	42.1	41-1		0.442									BLACK SAND AND GRAVEL
		41-3											
		41-4				8.74				134	13		
		41-9			71.55								
		41-10											(omitting 2.10%)
		42-1								125			

AV 1  
37.6  
4

check copy ✓  
calc. ✓

OK

Exploration Hole No. \_\_\_\_\_  
Sheet \_\_\_\_\_

Oregon Black Sand Property  
Shepherd

Sec. 16 T. 27N R. 27W  
County \_\_\_\_\_

Hole No. 27A Location 175 E. of 27.

Elev. 526 ft. TP's (found elev.)

Thickness overburden \_\_\_\_\_

Thickness of ore lens \_\_\_\_\_

Elev. bottom ore lens \_\_\_\_\_

Depth of hole \_\_\_\_\_

Elev. bottom of hole \_\_\_\_\_

Elev. water table 19' - cellar

Nature of bedrock shale

Drill used Empire 4" casing

Driller \_\_\_\_\_ Co. \_\_\_\_\_

Engr. in charge Paulsen

Mtrl. classified by Paulsen

Sampler Earl

Date hole begun 8-7-41

Date hole finished \_\_\_\_\_

Shifts actually drilled 3

Diam. casing 4" Diam. shoe 4 3/8"

Theoretical vol. per ft. this hole \_\_\_\_\_

Depth		Sample										Remarks
From	To	Cased To	Core Rise	Vol. Wet	Wt. Dry	Cr2O3	TiO2	Fe	P	SiO2		
15		16										Red, Grey Sand
16		17										" " "
17		18										" "
18		19?										" "
19		18.5										Blue Clay
19.2		18.7										" "
19.6		18.0										" "
19.8		19.3										" "
20.2		23.7										" "
20.5		23.9										" "
20.8		24.6										} 6 Grey Sand
21.6		24.6										
22.0		24.8				0.2						" "
22.2		25.7										" "
23.2		26.2										" "
24.0		26.5										" "
24.5		27.5										" "
24.5		27.5				0.3						} 7 "

O.K.

Oregon Black Sand Exploration

Hole No. 27A  
Sheet 2 of 27a

Shepherd Property

Sec. 16 T 27SR R 14W  
County Coos

Hole No. 27A Location 175' East  
of 27

Drill used Empire

Elev. of collar \_\_\_\_\_ (ground elev.)

Driller Burgess Co. Coos

Thickness overburden \_\_\_\_\_

Engr. in charge Paulsen

Thickness of ore lens \_\_\_\_\_

Mtrl. classified by Paulsen

Elev. bottom ore lens \_\_\_\_\_

Sampler Earl, Edward

Depth of hole \_\_\_\_\_

Date hole begun 8/7/41

Elev. bottom of hole \_\_\_\_\_

Date hole finished \_\_\_\_\_

Elev. water table 19' - Collar

Shifts actually drilled 3

Nature of bedrock \_\_\_\_\_

Diam. casing 4" Diam. shoe 4 3/8"

Theoretical vol. per ft. this hole \_\_\_\_\_

Depth			Sample								Remarks	
From	To	Cased To	Core Rise	Vol. Wet	Wt. Dry	Cr <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	Fe	P	SiO <sub>2</sub>		
25.0		25.4									} # 77	Grey Sand
25.6												"
27.3		27.2										
26.6		27.3										
28.1		28.0										
28.6		28.0			320	0.3						
29.0		28.6										
29.3		29.6										
29.8		33.6										
30.2		30.8		.0250 1026								
30.8		31.1										
31.2		31.5										
31.9		31.8										
31.5		32.2										
32.1		33.0				.33					} # 8	
32.6		34.2		.0544	140							
32.8		33.7										

OK

OREGON BLACK SAND Exploration

Hole No 27A  
Sheet 2 of 27A

SHEPHARD Property

Sec 16 R1S R14W  
County Coos

Hole No 27A Location 175 E. of  
27

Drill used Empire  
Driller Able Co. Coos  
Engr. in charge Paulsen  
Mtrl. classified by Paulsen  
Sampler Earl  
Date hole begun 8/7/41  
Date hole finished \_\_\_\_\_  
Shifts actually drilled \_\_\_\_\_  
Diam. casing 4" Diam. shoe 4 5/8"  
Theoretical vol. per ft. this hole \_\_\_\_\_

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 \_\_\_\_\_

Depth			Sample								Remarks	
From	To	Cased To	Core Rise	Vol. Wet	Wt. Dry	Cr2O3	TiO2	Fe	P	SiO2		
32.3	34.3					0.33					48	
32.8	35.3											
34.0	35.9											
35.7												
36.1	35.6											Red Sand
36.7	35.7											" "
37.2	36.2											" "
37.6	36.4			.0611	2200	0.36						9 Grey Sand
37.8	36.9											" "
37.3	37.5											" "
38.6	37.8										" "	
38.7	38.2										" "	
38.9	39.6										Start of 2" casing	
39.0				.0286	1790	0.37					10 Small percentage BS	
37.3											"	
40.0	40.2										"	
40.4	40.6										"	
40.9	41.1			.0171	1000	0.53					11 Black Sand	
42.3	42.5											

OK

OREGON BLACK SAND Exploration

Hole No. 27H  
Sheet 4 of 27H

Shepherd Property

Sec. 16 T27S R 14W  
County Coos

Hole No. 27H Location 175' E of Hole 27 - Also 250-300' south of T.P.s 15-19  
Elev. of collar \_\_\_\_\_ (ground elev.)  
Thickness overburden 40'  
Thickness of ore lens \_\_\_\_\_  
Elev. bottom ore lens \_\_\_\_\_  
Depth of hole \_\_\_\_\_  
Elev. bottom of hole \_\_\_\_\_  
Elev. water table 19  
Nature of bedrock \_\_\_\_\_

Drill used Empire 4"  
Driller Edle Co. Coos  
Engr. in charge Paulsen  
Mtrl. classified by Paulsen  
Sampler Earl  
Date hole begun \_\_\_\_\_  
Date hole finished \_\_\_\_\_  
Shifts actually drilled \_\_\_\_\_  
Diam. casing \_\_\_\_\_ Diam. shoe \_\_\_\_\_  
Theoretical vol. per ft. this hole \_\_\_\_\_

Depth		Sample											Remarks
From	To	Cased To	Core Rise	Vol. Wet	Wt. Dry	Cr <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	Fe	P	SiO <sub>2</sub>	#		
42.6		43		.0194	700	0.77						#12	Black Sand
43.0		43.5											
43.5		44.6		.0196	1300	8.06				151.5		#13	Black Sand
44.2		45.1											
44.2		44.6		.0138	1180	9.31				136.9		#14	
44.9													
45.3		45.7		.0154	7820	11.24				135		#15	
45.6		45.7											
46.6		46.2		.0635	780	11.79				137.0		#16	
46.8				.0455	720	15.76				147.3		#17	
47.4		48.3											
48.1				.0280	1800	8.67				108.8		#18	
48.3		49.0											
48.5		50.		.0360	580	6.89				123.9		#19	
49.6		49.0											
50.0		50.0		.0380	3620	6.31				119.4		#20	
50.0		51.1		.0400	4660	3.18				110.021			
51.1													

Check Copy ✓  
Calc. ✓  
9.02  
81.21  
5.40

OK





OREGON BLACK SAND Exploration

Hole No. 23

SHEPARD Property

Sheet 1

Sec. 76 T R

County COOS

Hole No. 23 Location \_\_\_\_\_

Drill used EMPIRE HAND DRILL

Driller TAYLOR Co.

Engr. in charge G. RIGGS

Mtrl. classified by \_\_\_\_\_

Elev. of collar \_\_\_\_\_ (ground elev.)

Sampler MILLER

Thickness overburden 34.8

Date hole begun 7-5-41

Thickness of ore lens 5.8

Date hole finished \_\_\_\_\_

Elev. bottom ore lens 40.6

Shifts actually drilled 4

Depth of hole 42.3

Diam. casing \_\_\_\_\_ Diam. shoe \_\_\_\_\_

Elev. bottom of hole \_\_\_\_\_

Elev. water table 33 FEET

Theoretical vol. per ft. this hole \_\_\_\_\_

Nature of bedrock \_\_\_\_\_

Depth	From To		Cased To	Core Rise	Vol. Wet	Kg. Wt. Dry	Sample					Remarks
	Cr2O3	TiO2					Fe	P	SiO2			
# 1	0.0	5.0										DIRT AND SAND
# 2	5.0	10.0										" "
# 3	10.0	15.0										SAND " CLAY
# 4	15.0	20.0										RED " CLAY
# 5	20.0	25.0										" "
# 6	25.0	30.0										" "
# 7	30.0	34.8				1.66		0.3				RED SAND WITH BLACK SAND
# 8	34.8	35.8		2.0	219	7.10		0.8				" "
# 9	35.8	37.0		9.0	1171	598		7.1				" "
# 10	37.0	38.2		8.0	233	10.66		11.5				" "
# 11	38.2	38.8		6.0	171	695		9.3				" "
# 12	38.8	41.8		4.0	205	11.07		12.7				FINE GRAVEL & BLACK SAND
# 13	40.6	41.8	41.8		342	0.61		4.3				GRAVEL AND CLAY
												" "
												" "
												" "
												" "
												" "
												" "

Copy

OK



OREGON BLACK SAND exploration

Hole No. 32  
Sheet 1 of 32

SHEPARD Property

Sec. 16 T 27 S R 14 S  
County Covs

Hole No. 32 Location 200 Feet N of Drill used Small Empire (Marshfield)  
Tact Pit 19

Elev. of collar \_\_\_\_\_ (ground elev.)

Driller Gurgess Co.

Engr. in charge Paulsen

Thickness overburden \_\_\_\_\_

Mtrl. classified by Paulsen

Thickness of ore lens \_\_\_\_\_

Sampler Earl

Elev. bottom ore lens \_\_\_\_\_

Date hole begun 8/9/41

Depth of hole \_\_\_\_\_

Date hole finished \_\_\_\_\_

Elev. bottom of hole \_\_\_\_\_

Shifts actually drilled \_\_\_\_\_

Elev. water table 7.0 Feet - Collar

Diam. casing 2" Diam. shoe 2"

Nature of bedrock \_\_\_\_\_

Theoretical vol. per ft. this hole \_\_\_\_\_

Depth		Sample										Remarks
From	To	Cased To	Core Rise	Vol. Wet	Wt. Dry	Cr <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	Fe	P	SiO <sub>2</sub>		
15.7	18.6											
17.4	19.5											
19.0	20.1											
23.5	23.8										5 Sub-sample used specimen only	
23.8	24.6											
24.7	25.5											
25.6	26.2											
25.3	26.2											
26.0	26.7			1.23	6.62	4.24				100.4	6	
26.3	26.9											
26.5												
26.6												
26.9												
27.2												
27.7	27.1											Gray Sand
27.8	27.2											
27.9	27.4											
												3.1

OK 200

OREGON BLACK SAND Exploration

Hole No. 32

SHEPARD Property

Sheet 20732

Sec. 16 T27S R14E  
County Cass

Hole No 32 Location 200' N. F.T.R.  
19

Drill used 2" Empire (Manchester)  
Driller Burgess Co.

Elev. of collar 125. (ground elev.)

Engr. in charge Pantson

Thickness overburden 25.0'

Mtrl. classified by Pantson

Thickness of ore lens Not definite 10-15'

Sampler Earl

Elev. bottom ore lens 89.7

Date hole begun 7/1/41

Depth of hole 35.8

Date hole finished 8/11/41

Elev. bottom of hole 39.7

Shifts actually drilled 2

Elev. water table 118.0

Diam. casing 2" Diam. shoe 2"

Nature of bedrock Clay

Theoretical vol. per ft. this hole \_\_\_\_\_

Depth			Sample									Remarks
From	To	Cased To	Core Rise	Vol. Wet	Wt. Dry	Cr <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	Fe	P	SiO <sub>2</sub>		
28.0	28.2											Sample to 4000
30.9	30.7											
30.8	32.1				3.6	1.05				106.1		7
31.6	32.1											
31.7	33.4											Trace of Black Sand
32.3	34.4											
33.8	"											"
33.8	35.0											
33.9	35.3				3.42	8920				100.		8
34.2												
34.4	35.0											8
34.7	35.8											
34.8	34.7											Blue Clay
												Sample 6 only
												12 42%
												11 122.0

Copy ✓  
Calc. ✓

OK



