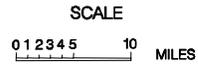


OREGON DEPARTMENT OF TRANSPORTATION

AGGREGATE SITES

DISTRICT 12

JUNE 2002

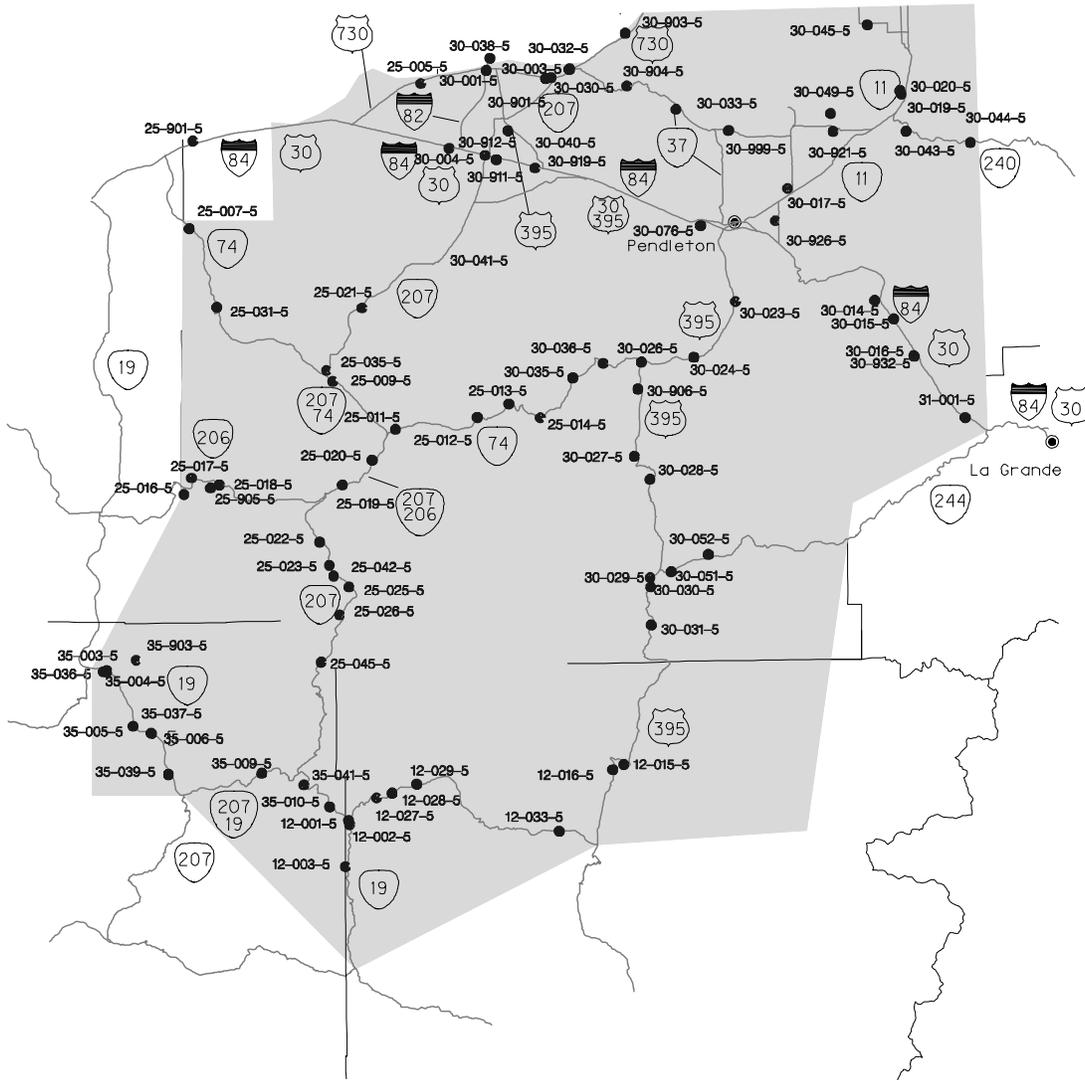


ROUTE AND HIGHWAY NUMBERS

- INTERSTATE
- U.S. ROUTE
- OREGON ROUTE

LEGEND

- COUNTY BOUNDARY
- 00-000-0 SITE ID NUMBER
- SITE LOCATION SYMBOL



List of Sites in District 12

Source Numbers

12-001-5	4
12-002-5	6
12-003-5	8
12-015-5	10
12-016-5	12
12-027-5	14
12-028-5	16
12-029-5	18
12-033-5	20
25-005-5	22
25-007-5	24
25-009-5	26
25-011-5	28
25-012-5	30
25-013-5	32
25-014-5	34
25-016-5	36
25-017-5	38
25-018-5	40
25-019-5	42
25-020-5	44
25-021-5	46
25-022-5	48
25-023-5	50
25-025-5	52
25-026-5	54
25-031-5	56
25-035-5	58
25-042-5	60
25-045-5	62
25-901-5	64
25-905-5	66
30-001-5	68
30-003-5	70
30-004-5	72
30-014-5	74
30-015-5	76
30-016-5	78
30-017-5	80
30-019-5	82
30-020-5	84
30-023-5	86
30-024-5	88
30-026-5	90
30-027-5	92
30-028-5	94
30-029-5	96
30-030-5	98
30-031-5	100
30-032-5	102
30-033-5	104
30-035-5	106
30-036-5	108

30-038-5	110
30-040-5	112
30-041-5	114
30-043-5	116
30-044-5	118
30-045-5	120
30-049-5	122
30-051-5	124
30-052-5	126
30-076-5	128
30-901-5	130
30-903-5	132
30-904-5	134
30-906-5	136
30-911-5	138
30-912-5	140
30-919-5	142
30-921-5	144
30-926-5	146
30-999-5	148
31-001-5	150
35-003-5	152
35-004-5	154
35-005-5	156
35-006-5	158
35-009-5	160
35-010-5	162
35-036-5	164
35-037-5	166
35-039-5	168
35-041-5	170
35-903-5	172

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County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Grant				12	0005	105.5	09S	26.0E	30
File ID		Source #	Date Visited	Map #			Type of Site		
05277, 27686		12-001-5	09/12/2000	1R-2-491			Gravel		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
44 45'22.38000"	119 38'21.97000"	609	6.42	NA					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type		Unit	Color	Weathering			Jointing		
Metamorphic/Igneous Gravel		Qal	NA	NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
NA			NA	120	24,000	38,880			
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			Closed	Adjacent to the John Day River				
Adjacent Land Use									
Ranching/Orchards/Kimberly, OR is adjacent									
Remarks									
This site is located adjacent to and south of Highway 19. The North Fork of the John Day River meets the main stem of the John Day River here. The gravel is composed of cobble (60%), pebble (10%), and sand (30%) sizes. The site is above the river level about 6 feet and below the highway about 8 feet. The ground is being used for a waste site. There is no gate. The property is being used for river access. Possible mitigation site.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

W

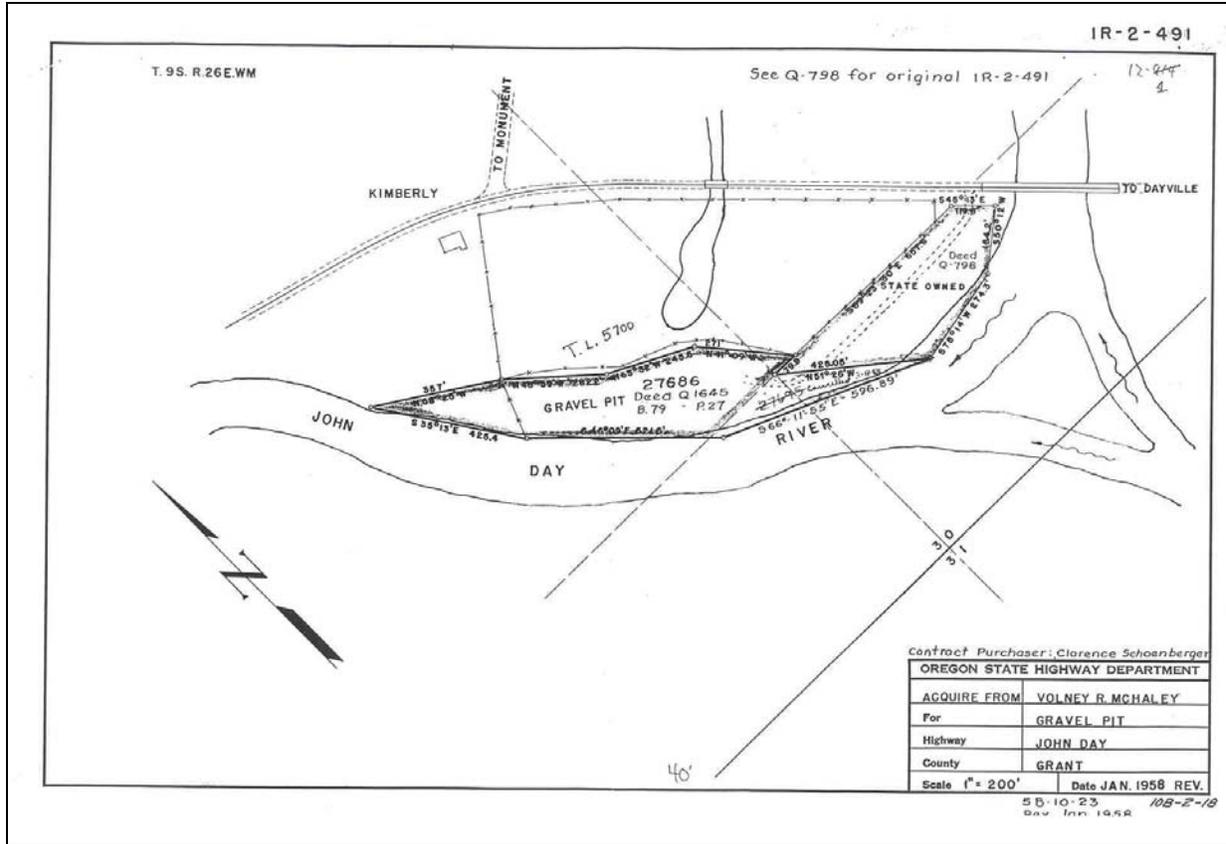
SE



View of the gravel site located adjacent to and south of Highway 19.



Close-up view of the gravel at this site composed primarily of cobble size material.



Aerial view of the gravel site located at the confluence of the North Fork of the John Day River with the main stem of the John Day River.

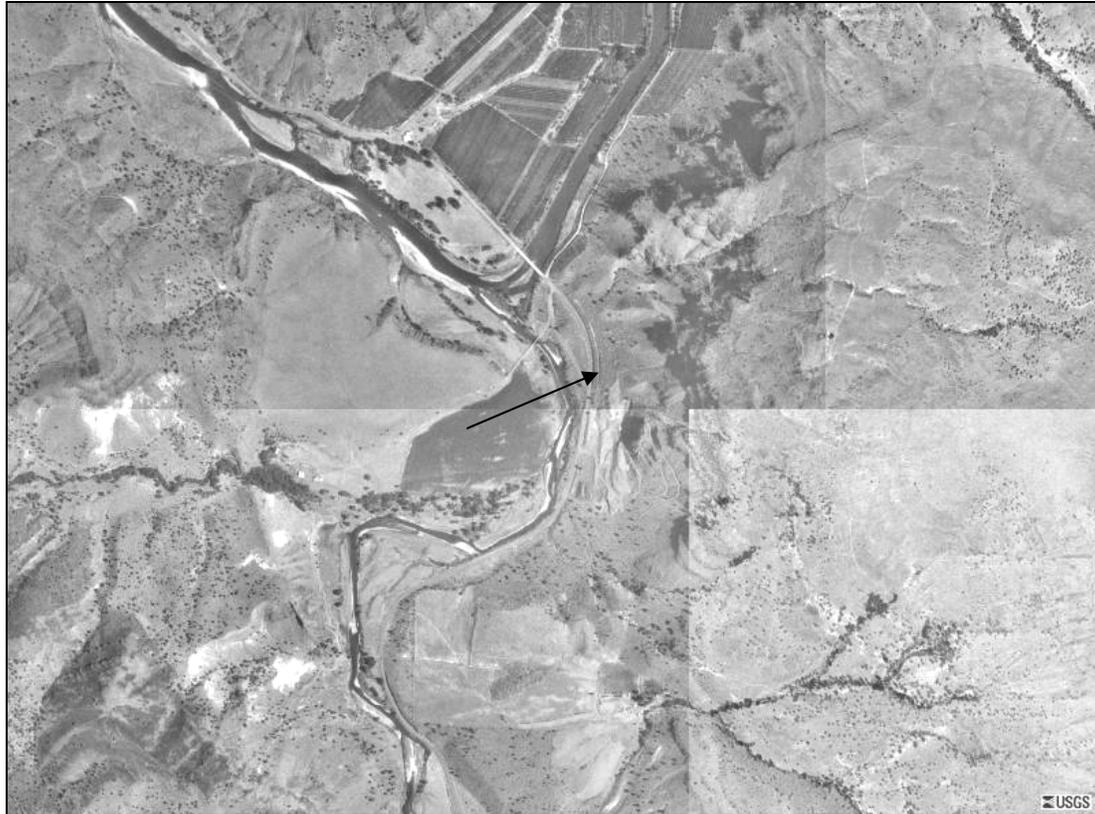
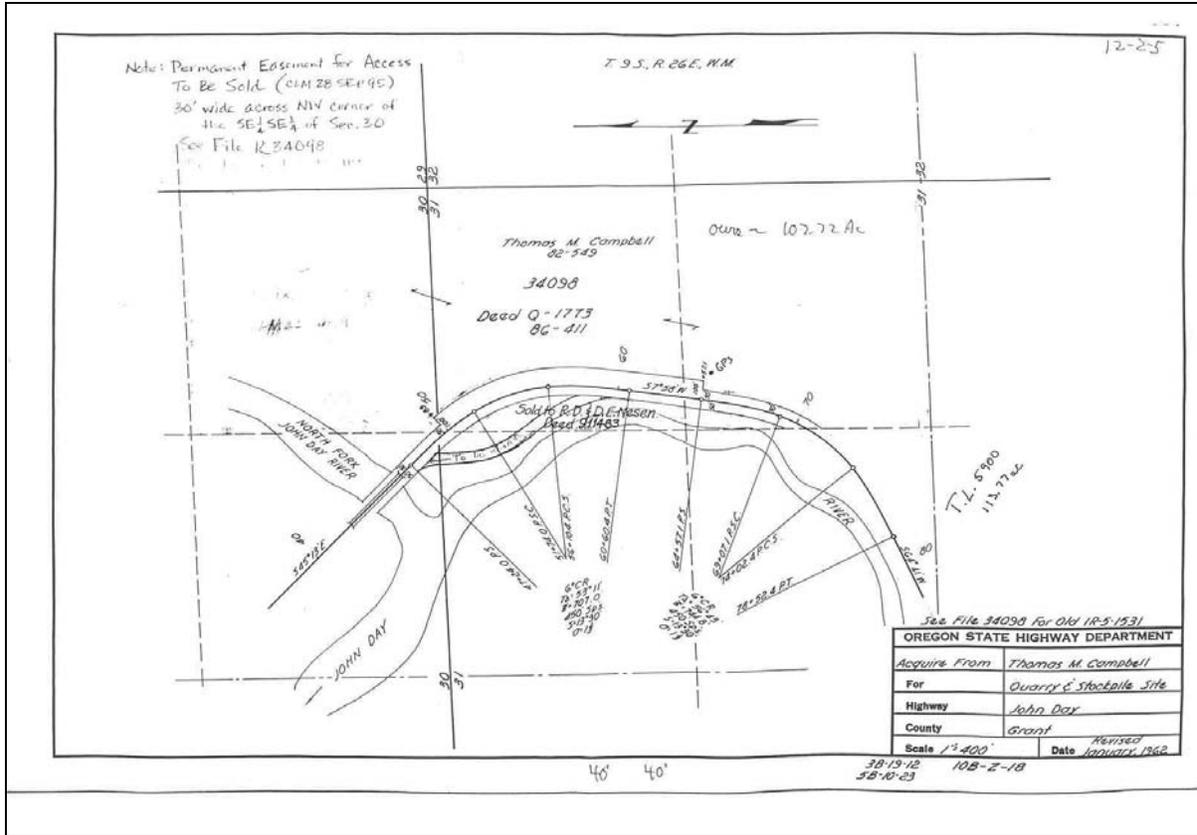
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Grant	Rose and Bone Creek Quarry			12	0005	106	09S	26.0E	30, 31
File ID		Source #	Date Visited		Map #		Type of Site		
34098		12-002-5	09/19/2000		1R-5-1531		Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #				
44 45'00.12667"	119 38'13.11455"	565.598	113.77	Unknown					
Comments									
GPS acquired at the site.									
Rock Type	Unit	Color		Weathering		Jointing			
Basalt	Tcp	Olive Black (5Y 2/1)		Decomposing to Slight		Highly Fractured			
Quality			Hardness	lbs./cu ft.	Reserve (cy)		Reserve (Tons)		
Poor to Good			R3	170	50,000		100,000		
Potentially Significant Site	Why			Open/Closed	Direction				
No				Closed	To the west about 150 meters is the John Day River				
Adjacent Land Use									
Open space/Fruit Orchards/Ranching.									
Remarks									
This site is adjacent to and east of Highway 19 just outside of Kimberly, OR. The rock is a medium to fine-grain highly fractured basalt. There are multiple flows with some decomposition and others that have slight weathering. This makes it very difficult to mine and to use for AC. Good for fill material. The terrain is gradual at the southern portion and vertical cliffs (300 ft. plus) at the middle and northern part of the site. There is no screening and plenty of room to work. There is no gate but we do have a sign up.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
2.788	2.835	20.8	24	16.0	20.1	0.9	27.0	1.5	
Material Use									
Quarry Rock (1996)									

N

SW



View looking to the east at the large (113.77 acres) quarry site located just outside of Kimberly, OR off of Highway 19.



Aerial view of the quarry site that is located adjacent to Highway 19.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Grant				12	0005	111.3	10S	26.0E	19
File ID		Source #	Date Visited	Map #			Type of Site		
11183		12-003-5	09/19/2000	1R-2-1424			Gravel		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
44 41'06.61000"	119 38'51.53000"	609	7.5	NA					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
Igneous Gravel	Qal	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Good			NA	120					
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			Closed	Adjacent to the John Day River				
Adjacent Land Use									
Ranching/Open space									
Remarks									
This site is adjacent to and west of Highway 19. The river has consumed most of the ground due to the location of this site. The ground was situated on the outside of the river radius and is all but gone. The road is about 6 feet above the river level.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

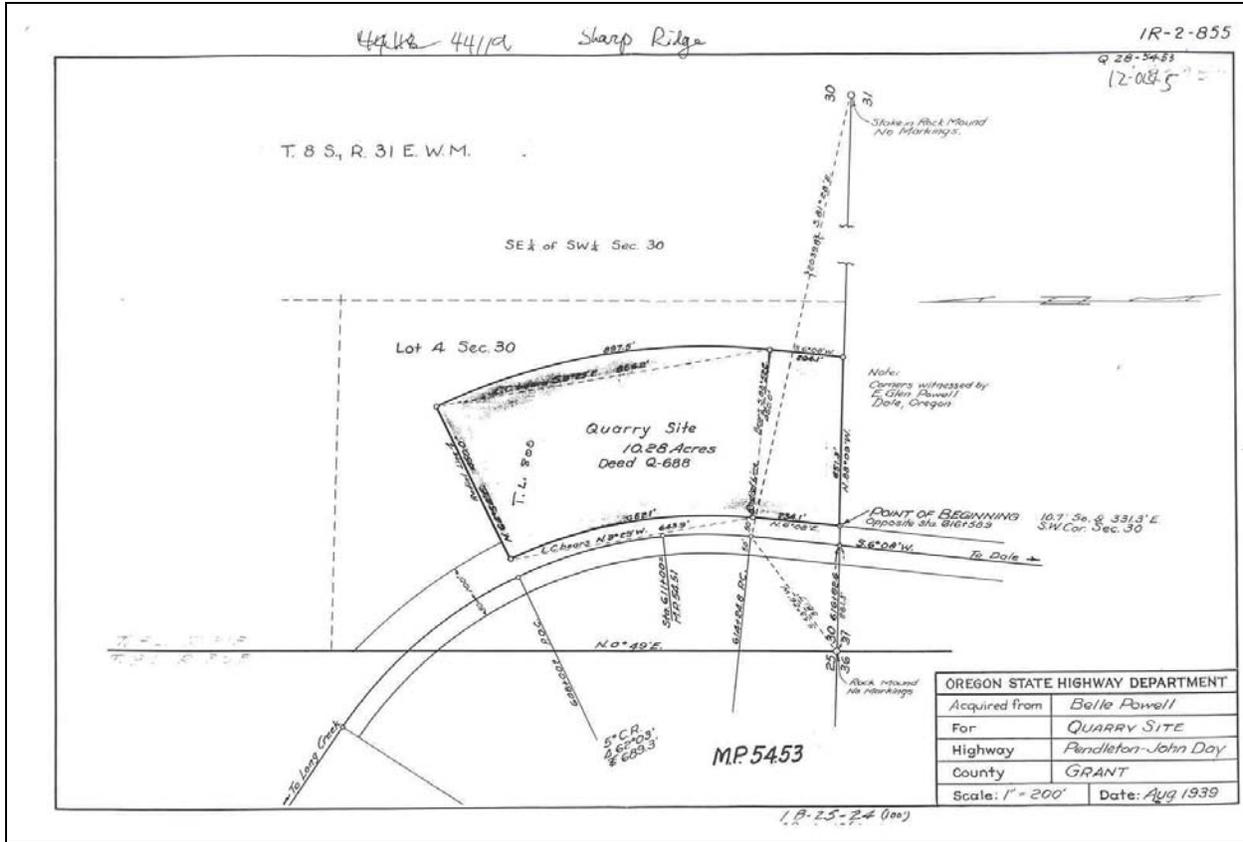


View of the gravel site located adjacent to and west of Highway 19.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Grant	Powell Quarry				12	0028	78.2	08S	31.0E	30
File ID		Source #	Date Visited	Map #			Type of Site			
07245		12-015-5	09/14/2000	1R-2-855			Stock Pile Site			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
44 50'17.66044"	119 02'26.51306"	945.961	10.28	NA						
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color		Weathering			Jointing			
Basalt	Tcp	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Cubic Yards	Reserve (Tons)				
NA			NA	150						
Potentially Significant Site	Why	Open/Closed	Direction							
No	NA	Closed	East and down about 200 feet is the North Middle Fork of the John Day River.							
Adjacent Land Use										
Open space										
Remarks										
This site is located east of and adjacent to Highway 395. The ground is flat next to the highway but slopes away very steeply down to the river below. This site is used as a waste rock area. With the proximity to the North Middle Fork of the John Day River and the steepness of the terrain I feel this is the best use of the site.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



View looking north at the stock pile site located east of and adjacent to Highway 395.



Aerial view of the stock pile site located adjacent to and west of Highway 395.

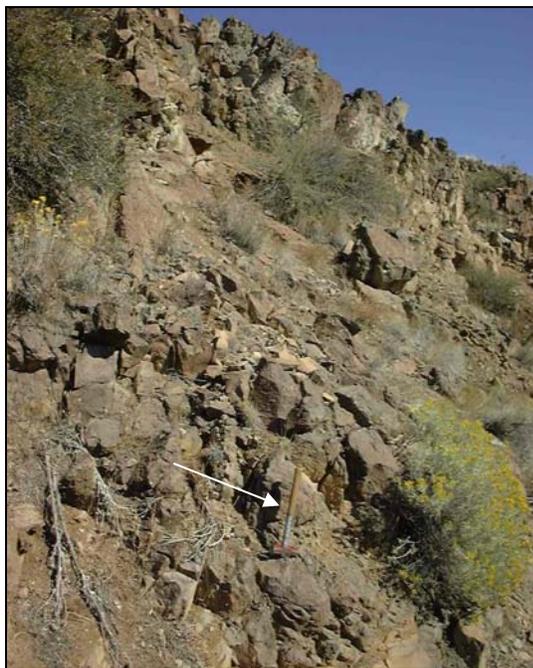
County	Site Name		Dist	Hwy	Mile Pt	TWP	RGE	Sect
Grant			12	0028	81.7	08S	30.0E	35, 36
File ID		Source #	Date Visited		Map #		Type of Site	
01695		12-016-5	09/14/2000		1R-1-1370		Quarry	
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #		
44 49'45.63465"	119 03'48.12483"	1192.635	2.18	<1				
Comments								
GPS acquired in the pit.								
Rock Type		Unit	Color		Weathering		Jointing	
Basalt		Tcp	NA		Moderate to Decomposing		Highly Fractured	
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)		
Poor to Fair			R3-	155	20,000	30,000		
Potentially Significant Site		Why			Open/Closed	Direction		
No		NA			Closed	NA		
Adjacent Land Use								
Open space								
Remarks								
This site is located west of and adjacent to Highway 395. The rock is a fine-grain decomposing basalt. There is no screening and no room to work. You can rip the material. The pit face is tall and all of the work in the future should be from the top down. The terrain is vertical along the highway and flat on top.								
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.
Material Use								

SW

N



View looking west across Highway 395 at the small quarry site.

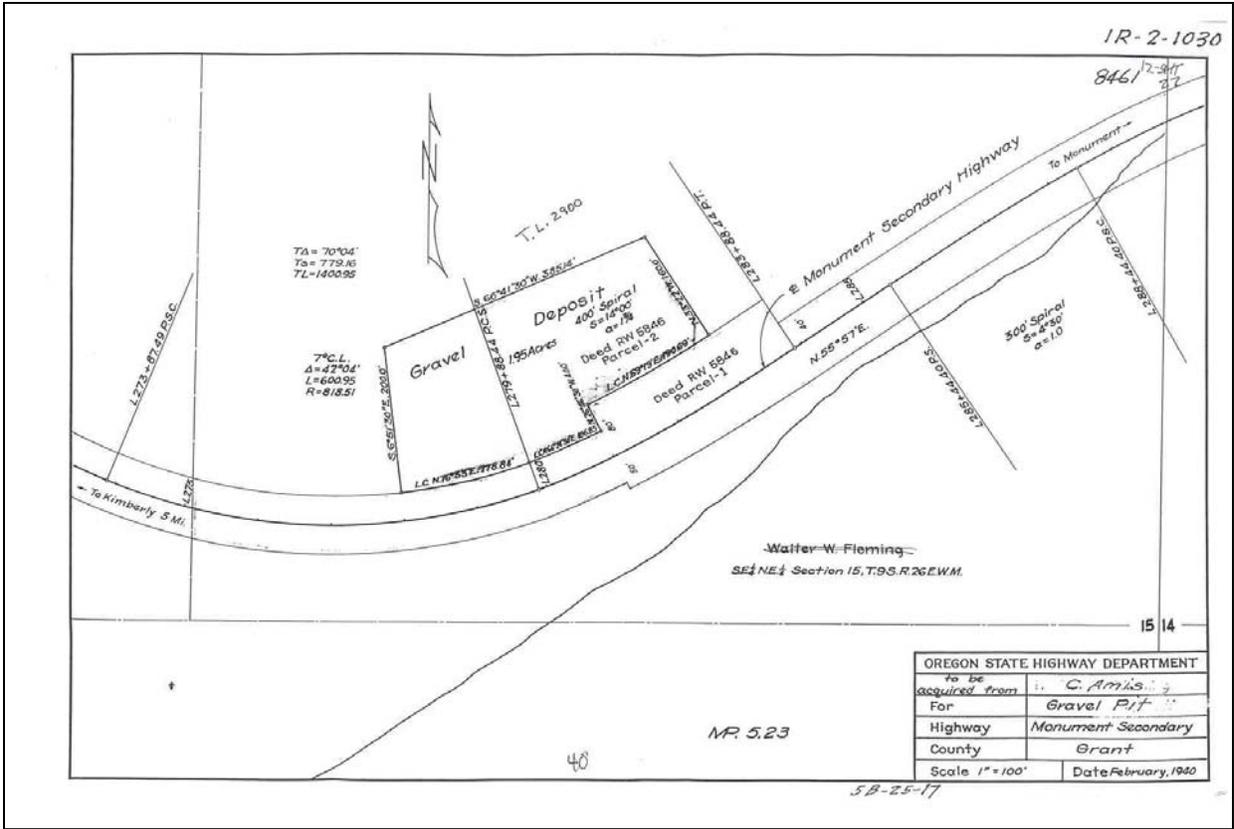


View of the highly fractured quarry face.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Grant				12	0402	5.2	09S	26.0E	15
File ID		Source #	Date Visited	Map #			Type of Site		
08461		12-027-5	09/19/2000	1R-2-1030			Raw Land		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
44 47'27.69000"	119 34'27.59000"	609	1.95	NA					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
Colluvium	NA	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
NA			NA	120					
Potentially Significant Site	Why	Open/Closed	Direction						
No	NA	Closed	To the south about 200 meters is the North Middle Fork of the John Day River.						
Adjacent Land Use									
Open space									
Remarks									
This site is located adjacent to and north of the Kimberly Long Creek Highway (402). It is just east of the County Road. This is raw land with no past visible disturbance. Most of the ground is composed of soils and minor basalts. The material would be used for fill only. There is no screening and very limited room to work.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
	2.63								
Material Use									
EAC (1993)									



View looking to the north at the small raw land site located along Highway 402.



Aerial view of the small raw land site located along Highway 402.

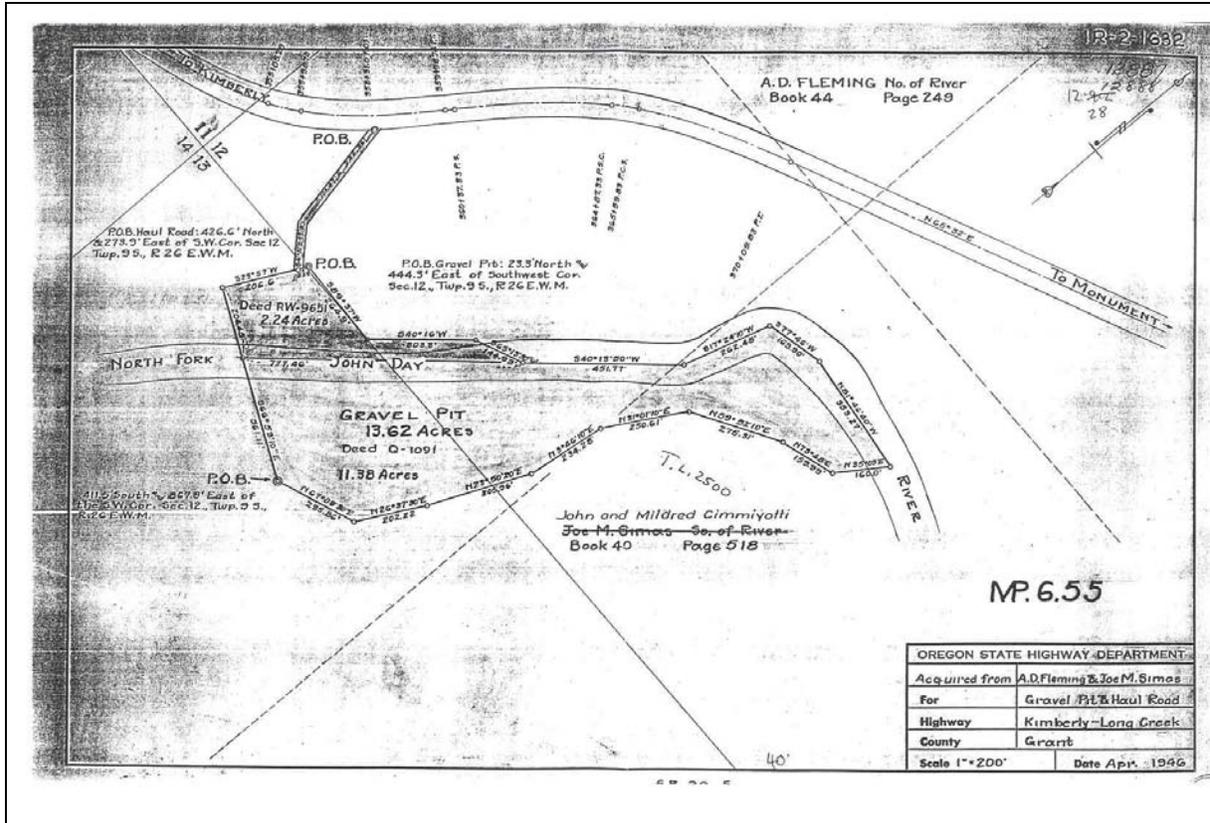
County	Site Name	Dist	Hwy	Mile Pt	TWP	RGE	Sect	
Grant		12	0402	6.6	09S	26.0E	12, 13	
File ID		Source #	Date Visited	Map #		Type of Site		
12888, 12887		12-028-5	09/14/2000	1R-2-1632		Gravel		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #			
44 47'50.11000"	119 32'54.05000"	609	13.62	NA				
Comments								
Lat. and Long. acquired using Terrain Navigator Software								
Rock Type	Unit	Color	Weathering		Jointing			
Gravel	Qal	NA	NA		NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)		
Good			NA	120				
Potentially Significant Site	Why			Open/Closed	Direction			
No	NA			Closed	NA			
Adjacent Land Use								
Ranching adjacent								
Remarks								
This site is located south of the Kimberly Long Creek Highway (402) about 450 meters. The ground is on both sides of the North Middle Fork of the John Day River. The easement has been fenced and is not evident anymore. Most of the property is on the south side of the river where there is no access. The ground is long and narrow. We might have some form of agreement with the Oregon Department of Fish and Wildlife about this site. Possible mitigation site?								
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.
Material Use								

NE

SW



View of the gravel site located north of Highway 402 about 450 meters.



Aerial view of the gravel site that is on either side of the North Middle Fork of the John Day River.

County	Site Name	Dist	Hwy	Mile Pt	TWP	RGE	Sect	
Grant		12	0402	10	09S	27.0E	04, 09	
File ID		Source #	Date Visited		Map #		Type of Site	
12896		12-029-5	09/14/2000		1R-2-1634		Gravel	
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #			
44 48'36.63000"	119 29'17.23000"	609	8.2	NA				
Comments								
Lat. and Long. acquired using Terrain Navigator Software								
Rock Type	Unit	Color		Weathering		Jointing		
Gravel	Qal	NA		NA		NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)		
NA			NA	120				
Potentially Significant Site	Why		Open/Closed		Direction			
No	NA		Closed		In the North Middle Fork of the John Day River			
Adjacent Land Use								
Ranching adjacent								
Remarks								
This site is south of the Kimberly Long Creek Highway (402) about 450 meters. Conversation with W. Walker, the adjacent property owner, showed me the easement and the boundary lines. He also informed me that he would buy the ground, or trade for some property up by the highway. He has about 20,000 cubic yards of gravel there. The river moved during the flood of 1996 and we lost the lions share of the ground. The site might have mitigation potential.								
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.
Material Use								

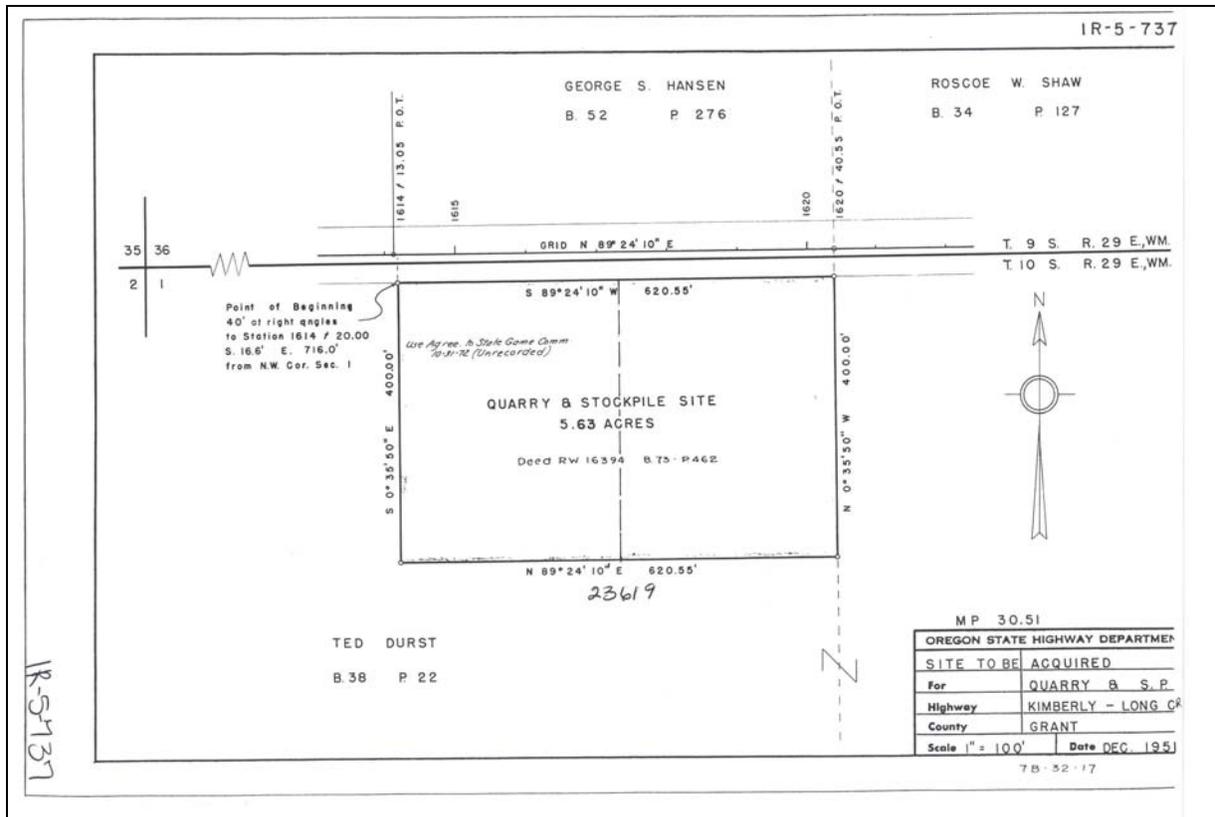


View of the gravel site located south of Highway 402 about 450 meters.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Grant				12	0402	30.5	10S	29.0E	01
File ID		Source #	Date Visited	Map #			Type of Site		
23619		12-033-5	09/14/2000	1R-5-737			Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
44 44'07.83664"	119 10'51.20736"	1285.492	5.63	<2					
Comments									
GPS acquired on site.									
Rock Type	Unit	Color		Weathering			Jointing		
Basalt	Tcp	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Fair			NA	155	96,000	144,000			
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			Closed	NA				
Adjacent Land Use									
Open space									
Remarks									
This site is adjacent to and south of the Kimberly Long Creek Highway (402). There is a small pond at the west end of the site. It gets stocked every fall with trout by ODFW. The rest of the ground is used as a stock pile site. There is no screening and plenty of room to work. The terrain is flat. The water table is about 3 to 5 feet below the surface here. We would need to de-water at this location if we wish to remove more material and acquire additional area for staging (crusher and stockpiles).									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									



View of the small pond that is stocked by ODFW that is located on the quarry site.

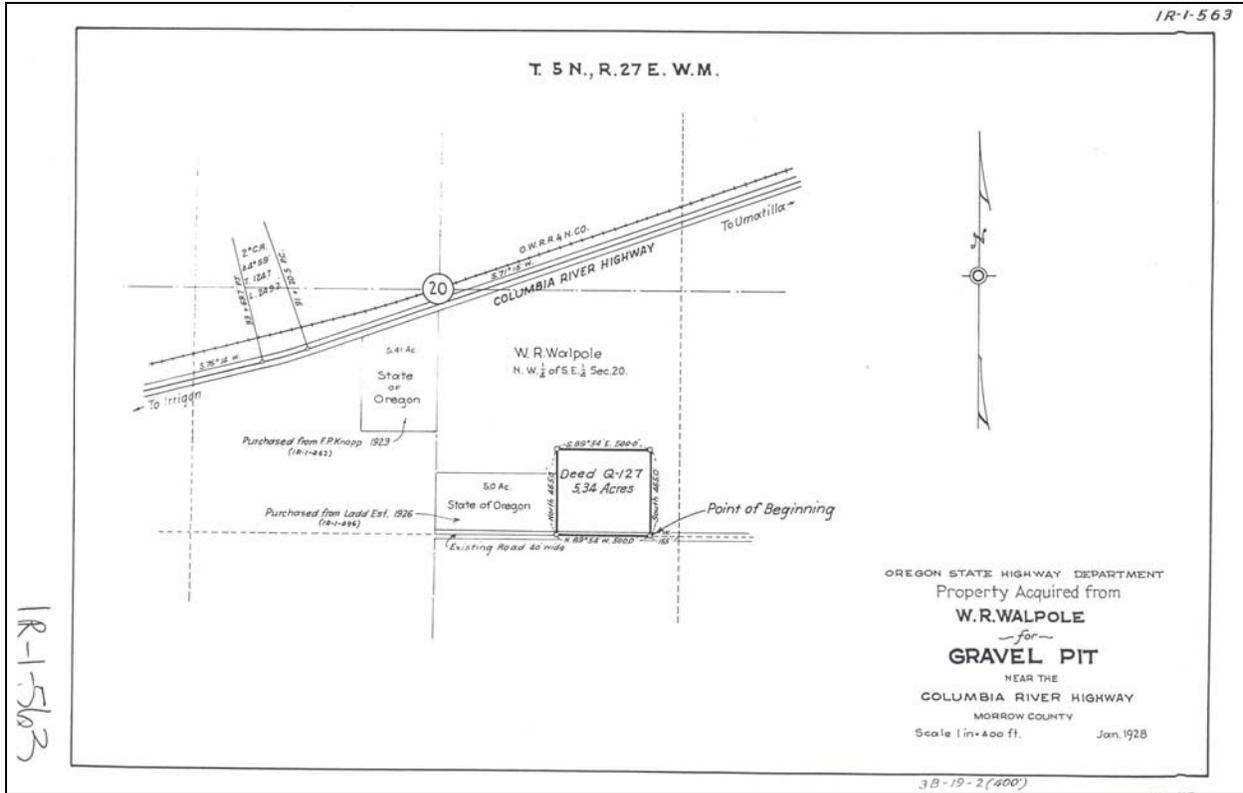


Aerial view of the quarry site adjacent to Highway 402, which has a small pond on the site.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Morrow				12	0002	175.98	05N	27.0E	20
File ID		Source #	Date Visited	Map #			Type of Site		
Q0173, Q0127		25-005-5	07/27/2000	1R-1-496, 1R-1-563			Stock Pile Site		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #				
45 53'51.03237"	119 27'40.07583"	99.716	10.34	<2					
Comments									
GPS acquired along East Oregon Lane adjacent to the pit.									
Rock Type	Unit	Color	Weathering			Jointing			
NA	Qgs	NA	NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
NA			NA	0					
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			NA	NA				
Adjacent Land Use									
Rural residential									
Remarks									
This site is located north and adjacent of Oregon Lane. The ground is used as a waste site now. The site is depleted of any material.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									



View of the depleted site off of East Oregon Lane that is now used as a stock pile site.



Aerial view of the stock pile site located adjacent to East Oregon Lane.

County	Site Name	Dist	Hwy	Mile Pt	TWP	RGE	Sect	
Morrow	Morgan Quarry	12	0052	9.65	02N	23.0E	07, 06	
File ID		Source #	Date Visited	Map #		Type of Site		
Q0136, Q0121		25-007-5	07/25/2000	1R-1-582, 1R-1-568		Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #			
45 40'31.58364"	119 58'40.55332"	154.691	4.72	<2				
Comments								
GPS acquired in the pit.								
Rock Type	Unit	Color	Weathering		Jointing			
Basalt	Tcs	Medium Dark Grey (N4)	Fresh to Slight		Massive to Moderately Fractured			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)		
Good			R3+	165	70,000	155,925		
Potentially Significant Site	Why			Open/Closed	Direction			
No	NA			Closed	West about 400 meters is Willow Creek			
Adjacent Land Use								
Farming/ house to the north approximately 400 meters								
Remarks								
This site is adjacent to Highway 74. The rock is a massive fractured fine-grain basalt. There is no screening from the highway and some room to work. You would need to drill and blast, but you could also rip. The terrain is gradual. Very limited staging area.								
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.
2.808	2.838	18.2	3.0	1.0	3.7	0.3	3.2	.2
Material Use								
Quarry Rock (1997)								

NW

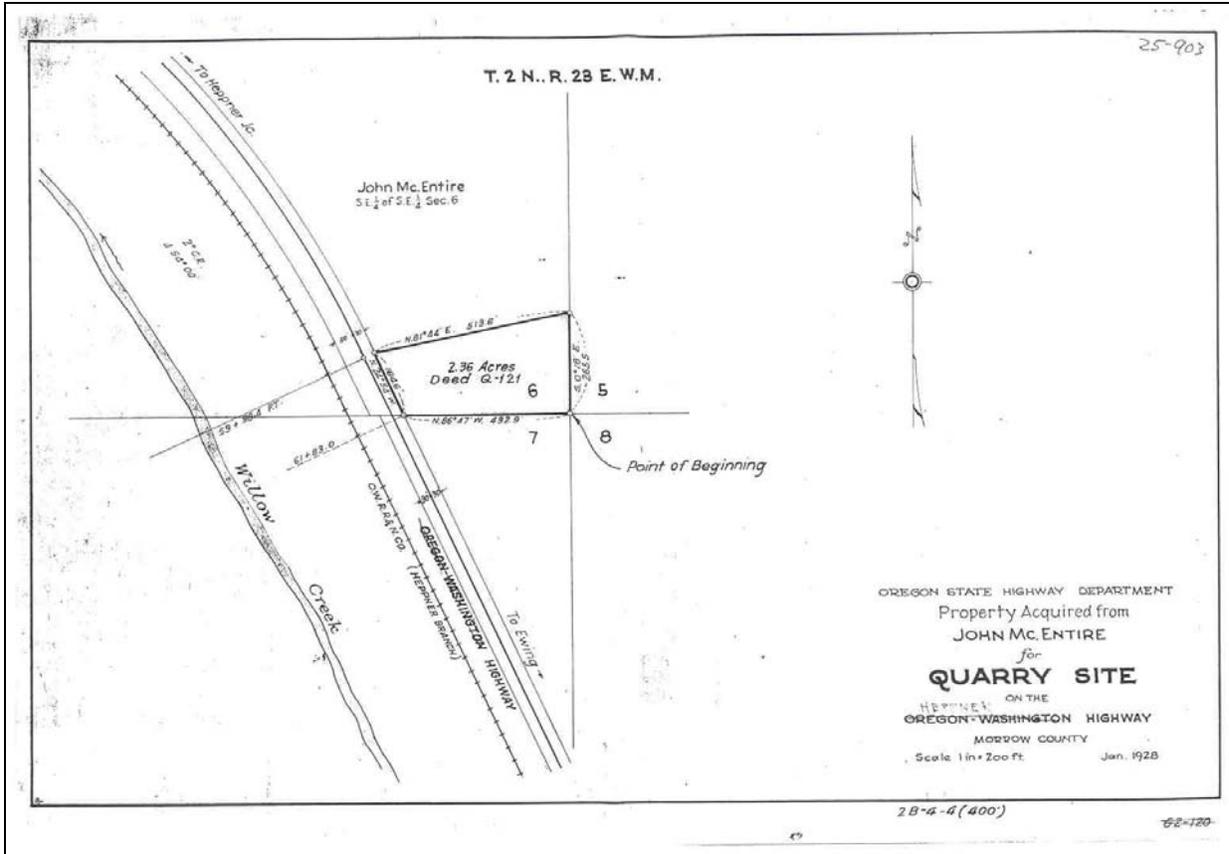
SE



View of the quarry site located adjacent to Highway 74.

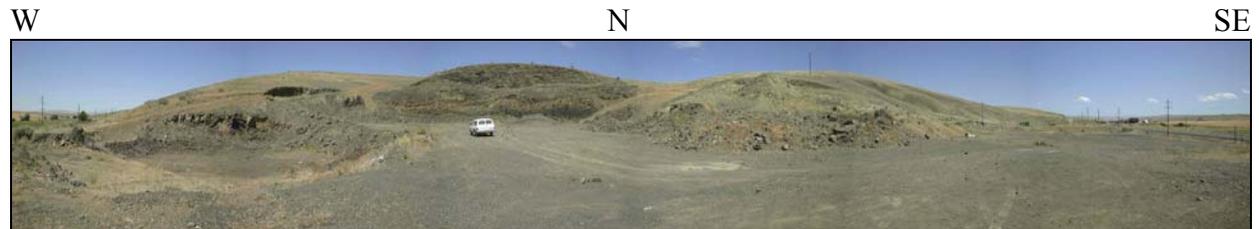


Close-up view of the massively fractured basalt found at this site.



Aerial view of the quarry site that is adjacent to Highway 74.

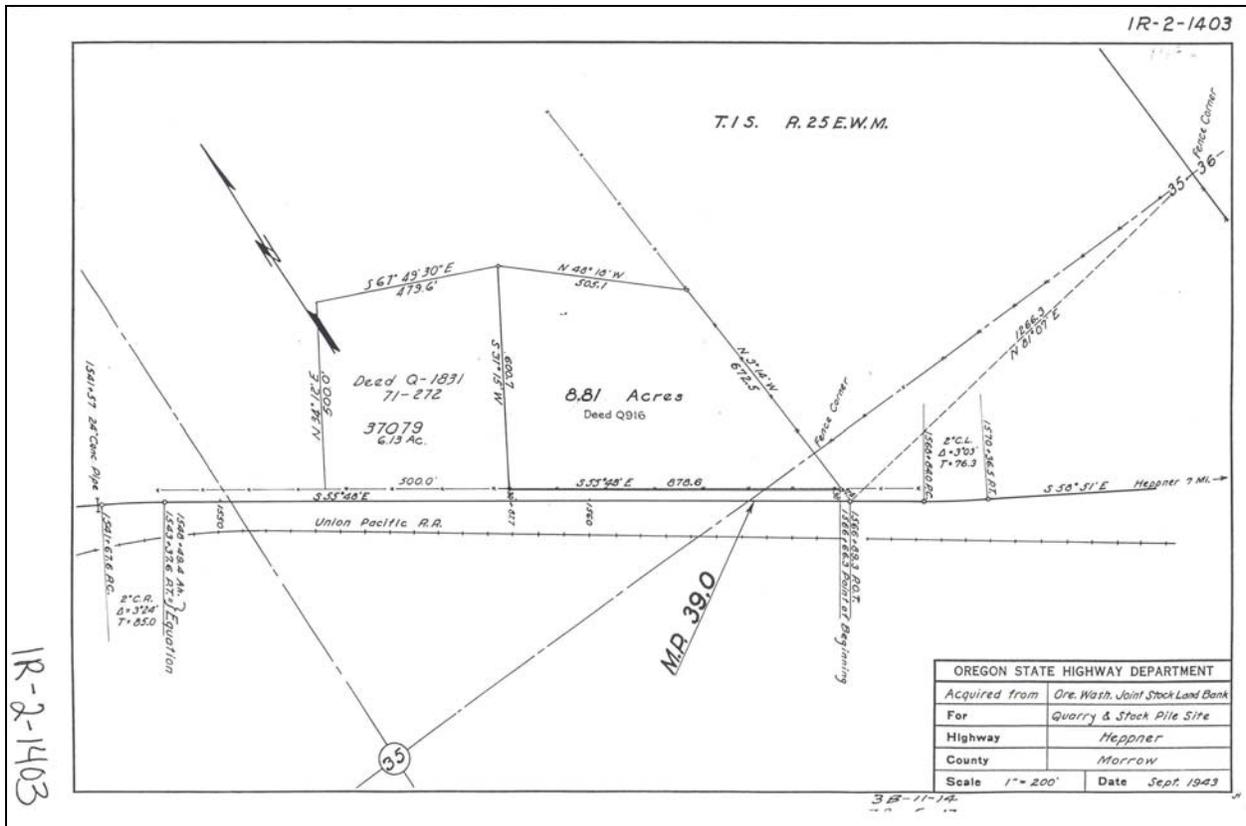
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Morrow	Lexington Quarry				12	0052	37.85	01S	25.0E	35
File ID		Source #	Date Visited	Map #		Type of Site				
11136, 37079		25-009-5	07/25/2000	1R-2-1403		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
45 26'14.86062"	119 39'51.08449"	467.942	14.94	<1	25-0017					
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color		Weathering		Jointing				
Basalt	Tcg	Medium Dark Grey (N4)		Fresh to Slight		Highly Fractured to Massive				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good to Very Good			R3+	172	300,000	450,000				
Potentially Significant Site	Why			Open/Closed	Direction					
Yes	NA			Closed	NA					
Adjacent Land Use										
Farming										
Remarks										
This site is just east of Lexington on Highway 74. The basalt is fine-grain and highly fractured. There are multiple flows exposed in the pit. Some of the rock is vesicular. There is room to work, but no screening from the highway. The terrain is rolling to gradual. It appears that half of the quarry is depleted.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.72	2.78	18.4	1.7	2.8			18.1	.4		
Material Use										
AC (1991)										



View of the quarry site that is located just east of Lexington on Highway 74.



Close-up view of the fine-grain highly fractured rock.

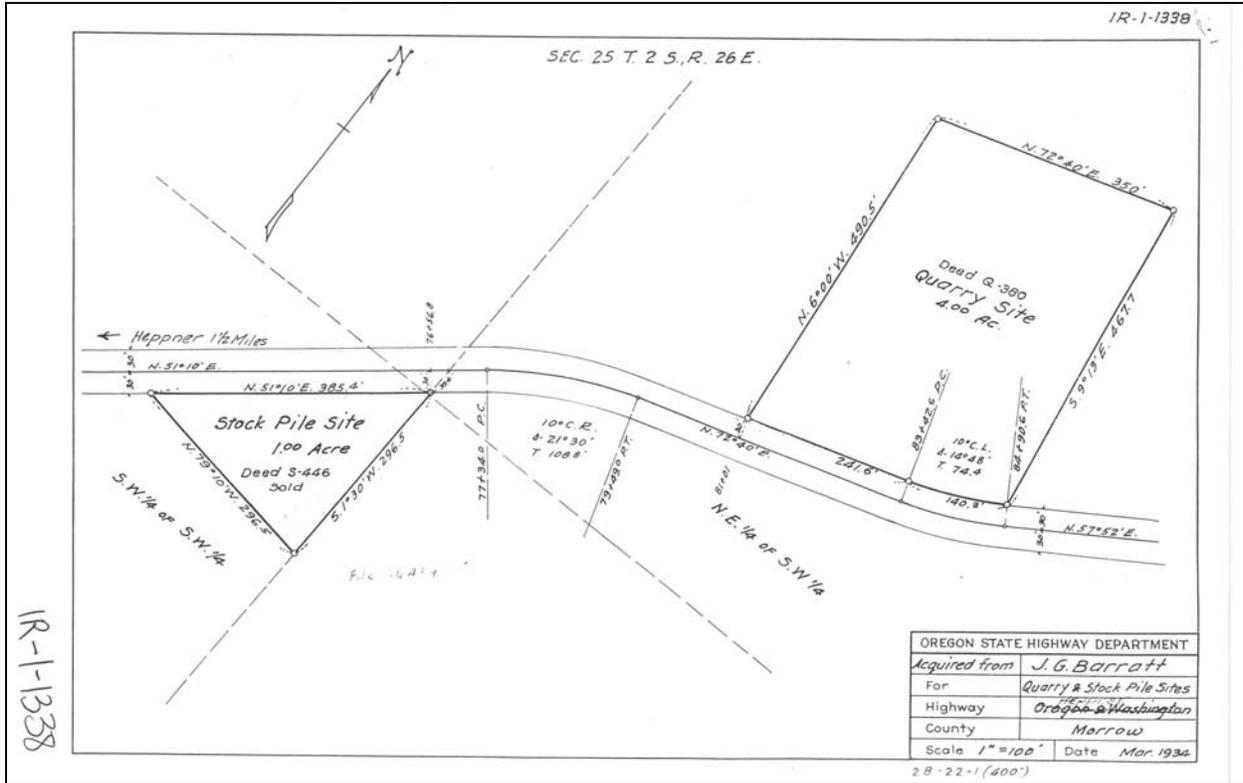


Aerial view of the quarry site located east of Lexington, OR on Highway 74.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Morrow	Barratt Quarry				12	0052	47.9	02S	26.0E	25
File ID		Source #	Date Visited	Map #			Type of Site			
01393		25-011-5	07/25/2000	1R-1-1338			Raw Land			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
45 21'41.52000"	119 31'39.64000"	668	4	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
Basalt	Tcg	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good			NA	120	65,000	105,300				
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			NA	NA					
Adjacent Land Use										
Farming and Ranching										
Remarks										
This site is located north of and adjacent to Highway 74, just east of Heppner. The site has no prior disturbance and has been fenced. There is no access to this site and our stock pile site across the highway. There is no screening and limited room to work. The terrain is gradual with a dry draw bisecting the property.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



View of the raw land site located north of and adjacent to Highway 74.



Aerial view of the raw land site located just north of Highway 74.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Morrow				12	0052	57.5	02S	28.0E	21
File ID		Source #	Date Visited	Map #			Type of Site		
08913		25-012-5	07/25/2000	1R-2-1123			Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
45 22'42.17652"	119 20'49.56102"	977.295	9.52	<3		25-0063			
Comments									
GPS acquired at access point.									
Rock Type	Unit	Color		Weathering			Jointing		
Basalt	Tcg	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Good			NA	155	100,000	209,250			
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			Closed	NA				
Adjacent Land Use									
Open space									
Remarks									
This site is located north of and adjacent to Highway 74. The ground appears to have been reclaimed sometime in the past. All or part, I could not tell. The rest of the ground is used for a stockpile and waste rock site. If half was reclaimed, then we could use up to 4.0 acres at a depth of 30 plus feet. The terrain is fairly flat. This site is at the top of the grade along Highway 74. This is good for embankment material only.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
2.614	2.727	16.3	9.0	3.0	9.2	12.7	7.8	10.2	
Material Use									
Quarry Rock (1998)									



View looking north at the stock pile sites that are adjacent to Highway 74.

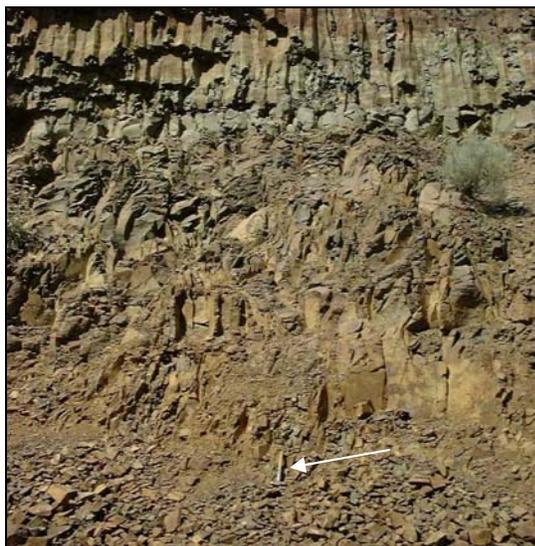
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Morrow	Hughes Quarry				12	0052	62.4	02S	28.0E	13
File ID		Source #	Date Visited	Map #			Type of Site			
Q0083		25-013-5	07/25/2000	1R-1-508			Quarry			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
45 23'56.39988"	119 16'38.10549"	773.855	4.72	<1						
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color		Weathering			Jointing			
Basalt	Tcg			Slight to Fresh			Highly Fractured			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good			R3	155						
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	NA					
Adjacent Land Use										
Open space										
Remarks										
This site is located adjacent to Highway 74 on a very sharp corner. The site is too small and in a difficult location for aggregate removal. The maximum area here for aggregate would be 2 acres not the 4.72. There is no room to work and no screening from the highway. This site is on the outside radius of a 20 mile per hour corner and would pose a danger. The terrain is moderately steep and sloping a multitude of different directions.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

NW

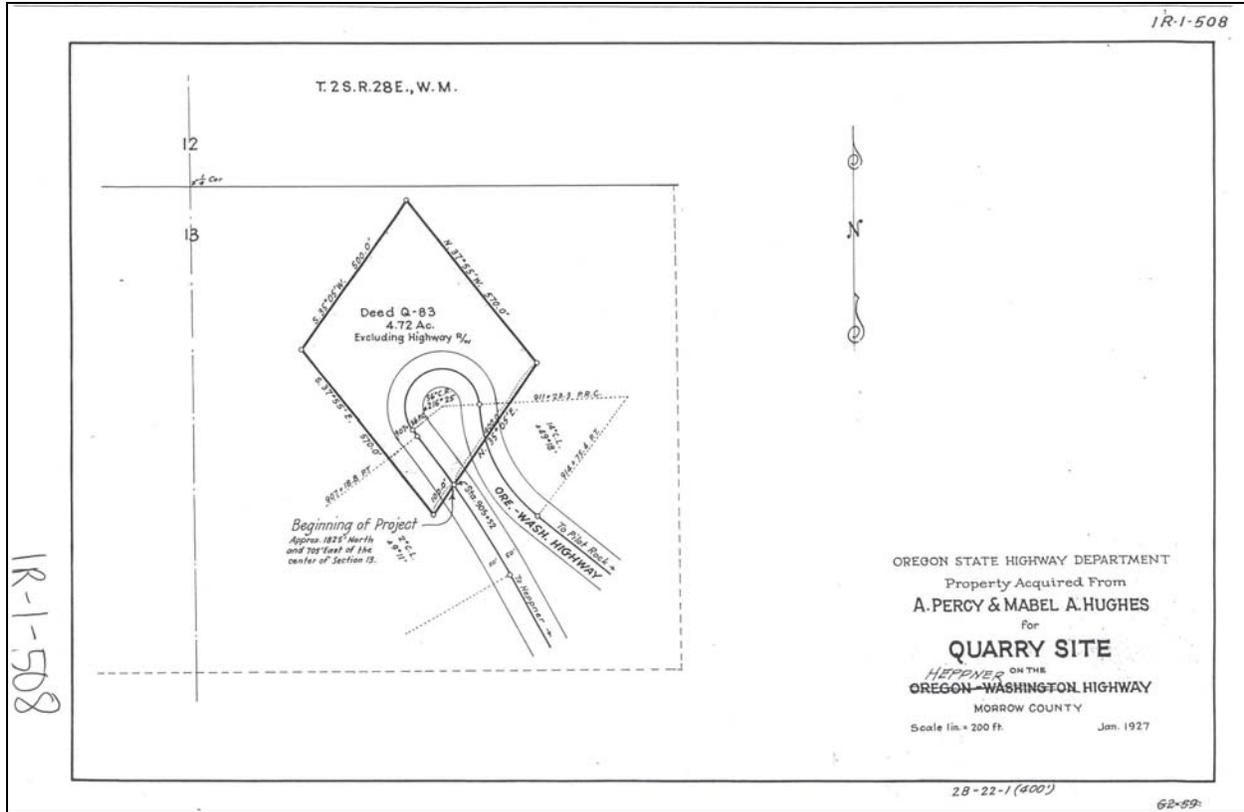
NE



View of the quarry site located adjacent to Highway 74 on a very sharp corner.



Close-up view of the highly fractured quarry face.



Aerial view of the small quarry site located on Highway 74 on a very sharp corner.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Morrow	Franklin Hill			12	0052	67.4	02S	29.0E	21, 22
File ID		Source #	Date Visited	Map #			Type of Site		
Q0091, 19617		25-014-5	07/25/2000	1R-1-501			Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
45 22'36.40150"	119 12'30.92432"	1018.382	9.11	<3		25-0028			
Comments									
GPS acquired in the pit.									
Rock Type	Unit	Color		Weathering			Jointing		
Basalt	Tcg	Medium Dark Grey (N4)		Fresh			Highly Fractured		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Good			R3+	166	80,000	120,000			
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			Closed	NA				
Adjacent Land Use									
Open space									
Remarks									
This is the eastern most site, adjacent to the south along Highway 74. The rock is a fine-grain highly fractured fresh basalt. You can rip the material into dice rock for crushing. There is plenty of room to work, but no screening. The terrain is gradual, with no overburden.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
2.63	2.71	17.2	7.4	4.7			20.5	1.2	
Material Use									
Emulsifier (1991)									

E

N



View of the quarry site that is located adjacent to and south of Highway 74.



Close-up view of the highly fractured basalt found at this quarry site.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Morrow					12	0300	54.8	03S	23.0E	31
File ID		Source #	Date Visited	Map #		Type of Site				
42140		25-016-5	07/26/2000	1R-4-308		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
45 15'49.46562"	119 59'38.73370"	795.334	189	<2						
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color		Weathering		Jointing				
Basalt	Tcg	Medium Dark Grey (N4)		Slight		Highly Fractured				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good to Fair			R3-	169	1,000,000	1,500,000				
Potentially Significant Site	Why			Open/Closed	Direction					
No	USA ground			Closed	NA					
Adjacent Land Use										
Open space										
Remarks										
This site is south of Hale Ridge Road off of Highway 206. The rock is a medium-grain highly fractured basalt. There is ample room to work and good screening from the highway. You can rip the rock. The ground slopes away from the county road and can be up to a twenty degree incline. USA ground.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

W

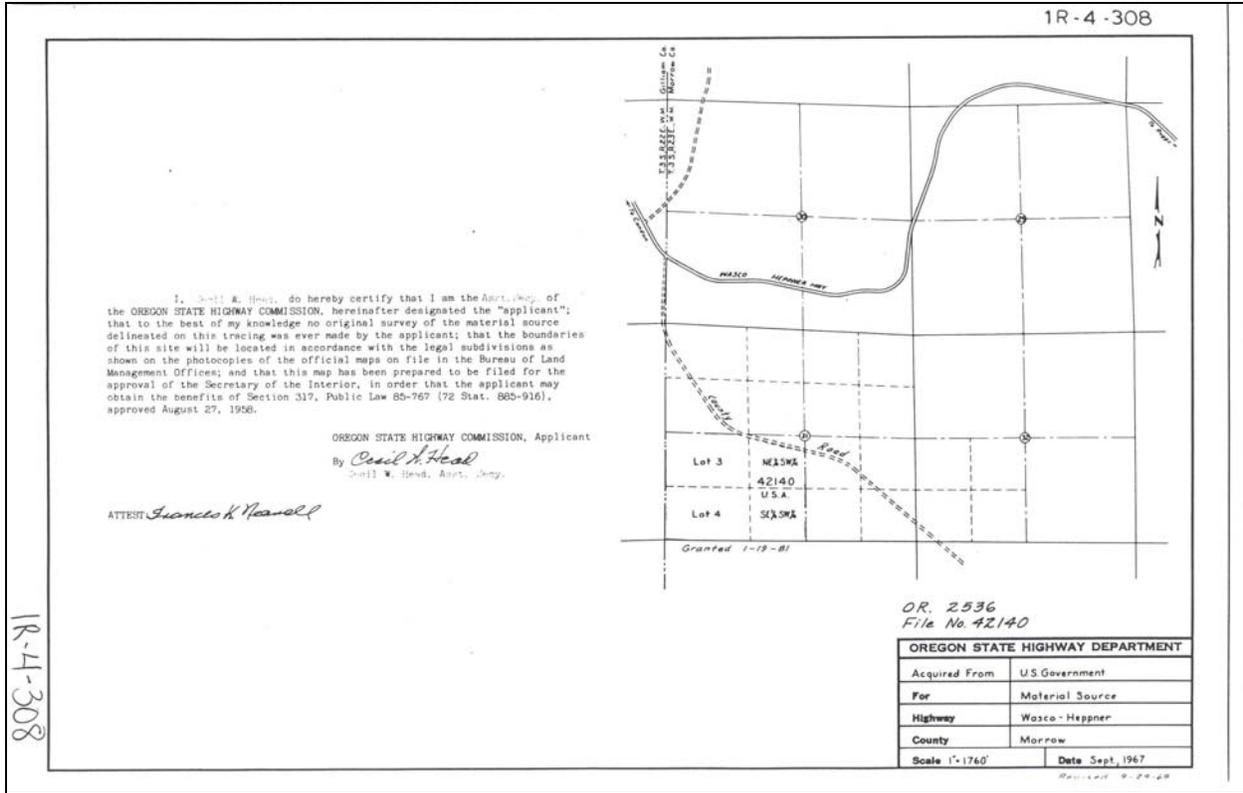
SE



View of the 189 acre quarry site located south of Hale Ridge Road and off of Highway 206.



View of the highly fractured basalt found at this large quarry site.



Aerial view of the 189 acre quarry site located off of Highway 206.

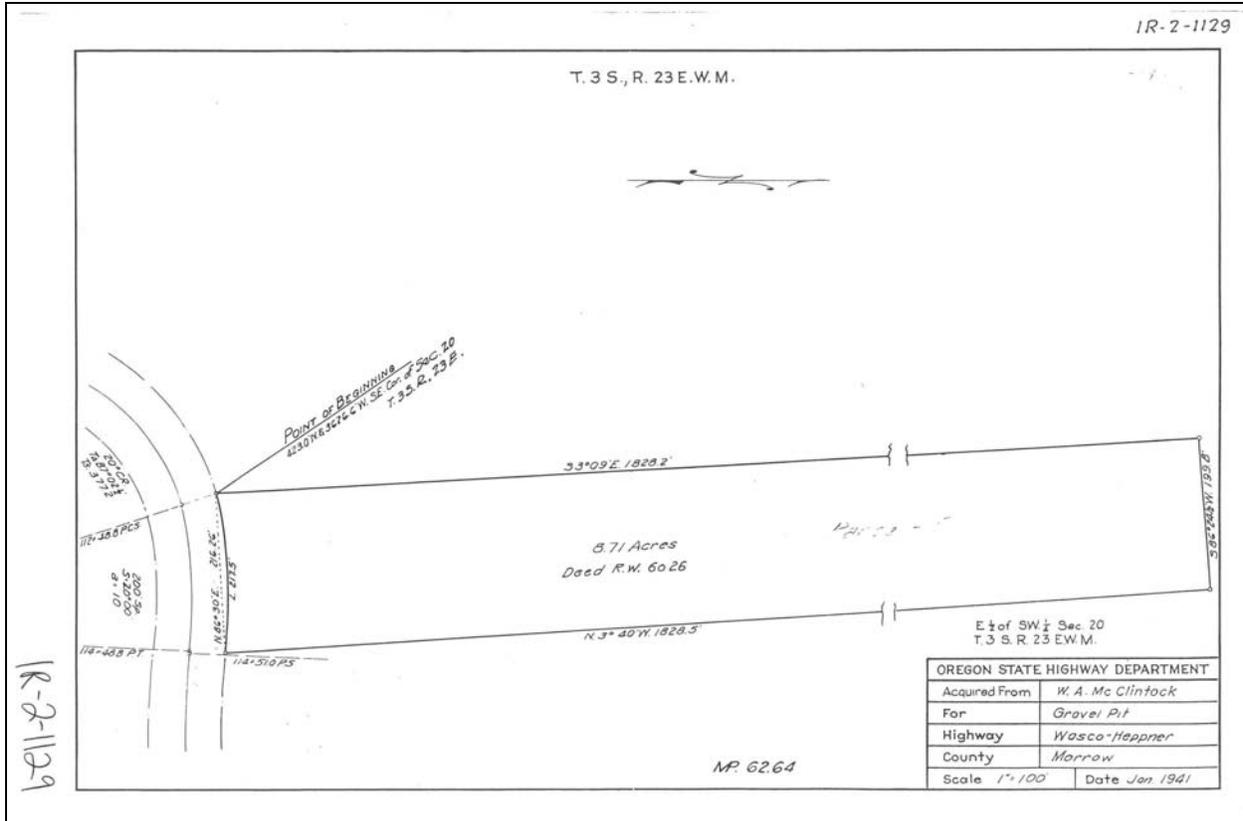
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Morrow				12	0300	57.00	03S	23.0E	20
File ID		Source #	Date Visited	Map #			Type of Site		
08930		25-017-5	07/26/2000	1R-2-1129			Raw Land		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
45 17'17.77000"	119 58'27.87000"	670	8.71	NA					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
Basalt	Tcg	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Good			NA	120					
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			NA	NA				
Adjacent Land Use									
Open space									
Remarks									
This is raw land adjacent to and north of Highway 206. The basalt rocks in the area are good quality. This site is way too narrow, at less than 200 feet wide and 1828 feet long. The terrain is steep at about 30 to 35 degrees with no access to the ground.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

NW

N



View from Highway 206 looking at the raw land site.

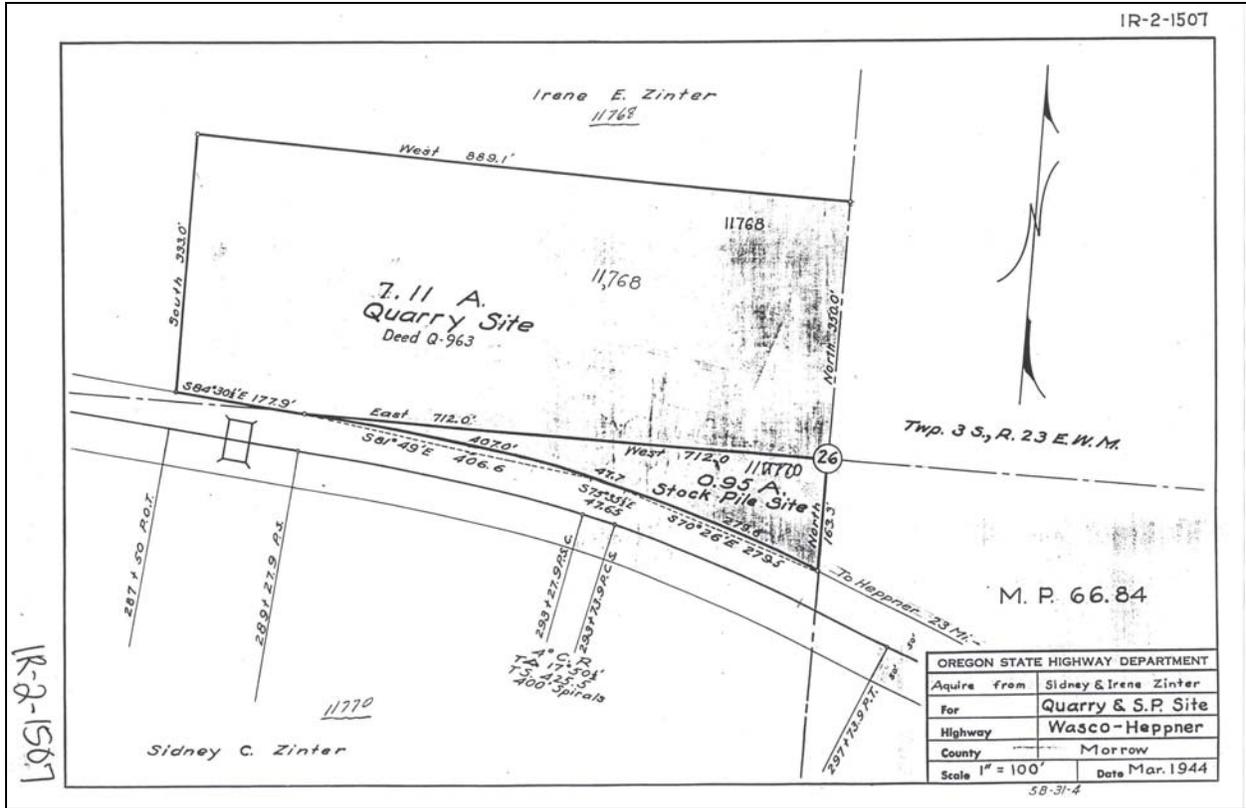


Aerial view of the raw land site located north of Highway 206.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Morrow					12	0300	60.3	03S	23.0E	26
File ID		Source #	Date Visited	Map #		Type of Site				
11768, 11770		25-018-5	07/25/2000	1R-2-1507		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
45 16'41.10469"	119 54'55.01673"	695.484	8.06	NA						
Comments										
GPS acquired on site.										
Rock Type	Unit	Color		Weathering		Jointing				
Basalt	Tcg	Medium Dark Grey (N4)		Slight		Highly Fractured				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good			R3	155	95,000	142,500				
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			NA	NA					
Adjacent Land Use										
Open space										
Remarks										
This site is adjacent to and north of Highway 206. There are a few cat cuts and that is all of the disturbed ground here. Most of the ground is natural or reclaimed. There is no screening and some room to work. You can rip the material into (20cm) dice rock. There is a dry draw on the site that bisects the ground. Gradual rolling terrain.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



View of the quarry site located adjacent to and north of Highway 206.



Aerial view of the quarry site located north of Highway 206.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Morrow	Cason Canyon				12	0300	75.7	03S	25.0E	25
File ID		Source #	Date Visited	Map #		Type of Site				
07536, 34662		25-019-5	07/26/2000	1R-5-1576		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
45 16'34.55666"	119 38'44.15114"	807.238	30.95	<6	25-0007					
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color		Weathering		Jointing				
Basalt	Tcg	Medium Dark Grey (N4)		Fresh to Slight		Highly Fractured				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good			R3	172	1,000,000	1,500,000				
Potentially Significant Site	Why			Open/Closed	Direction					
Yes	NA			Closed	NA					
Adjacent Land Use										
Open space										
Remarks										
This site is adjacent to and north of Highway 206. The rock is a fine-grain slightly vesicular, highly fractured basalt. There are multiple flows to rip for pit run. There is ample room to work, but no screening from the highway. The terrain is a gradual slope. This site is close to being depleted.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
		13.3	5.6	6.4	1.2			5.2		
Material Use										
AC (1988)										

SW

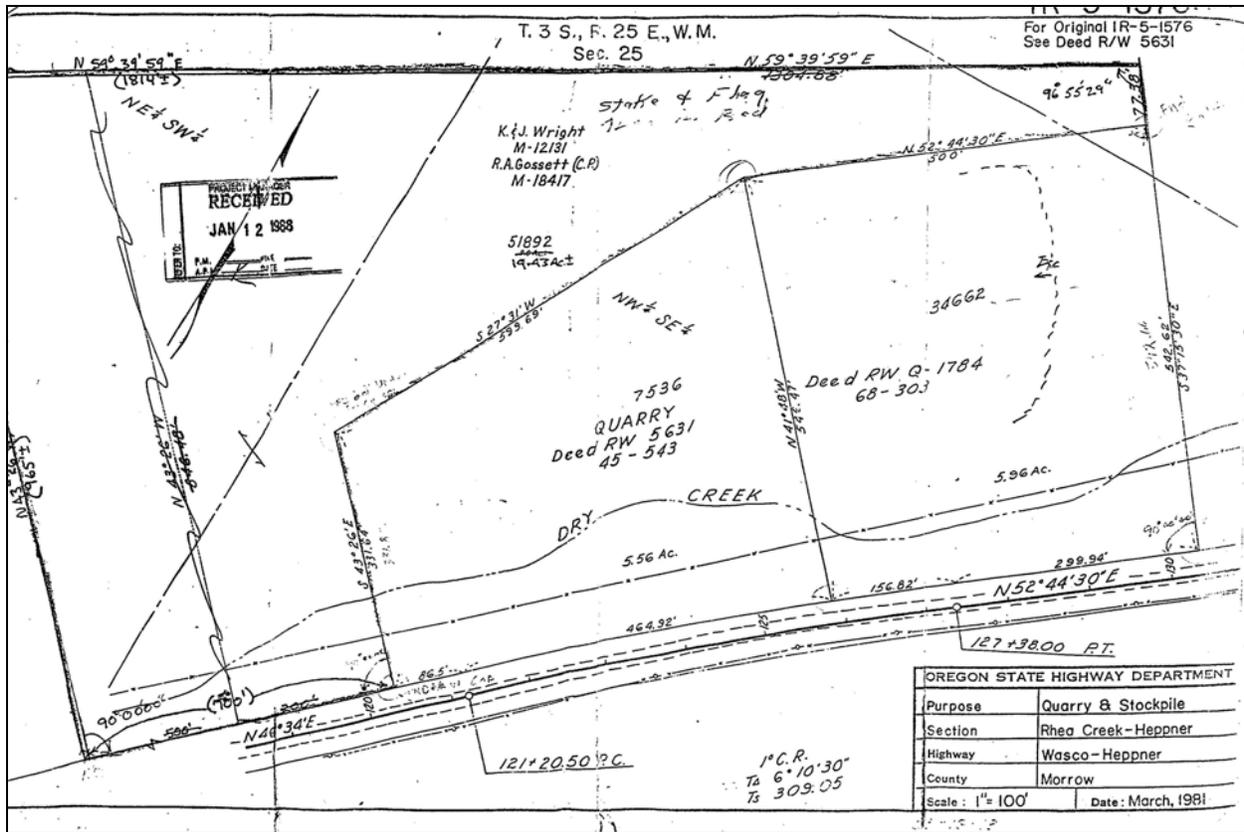
NE



View of the closely depleted quarry site located north of Highway 206.



Close-up view of the fine-grain slightly vesicular, highly fractured basalt found at the quarry.



Aerial view of the quarry site located north of Highway 206.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Morrow	Rhea Creek			12	0300	81	03S	26.0E	09
File ID		Source #	Date Visited	Map #			Type of Site		
06680		25-020-5	07/26/2000	1R-2-799			Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
45 18'52.60238"	119 34'45.22479"	800.375	3.67	<1					
Comments									
GPS acquired in the pit.									
Rock Type	Unit	Color		Weathering			Jointing		
Basalt	Tcg	Medium Dark Grey (N4)		Fresh			Highly Fractured		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Good			R3+	171	45,000	103,883			
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			Closed	NA				
Adjacent Land Use									
Open space									
Remarks									
This is a long and narrow site adjacent to the west of Highway 206. The rock is a fine-grain, highly fractured basalt. It fractures into sharp angular pieces. You can rip the material. There is limited room to work and no screening. The ground is close to being depleted.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

SW

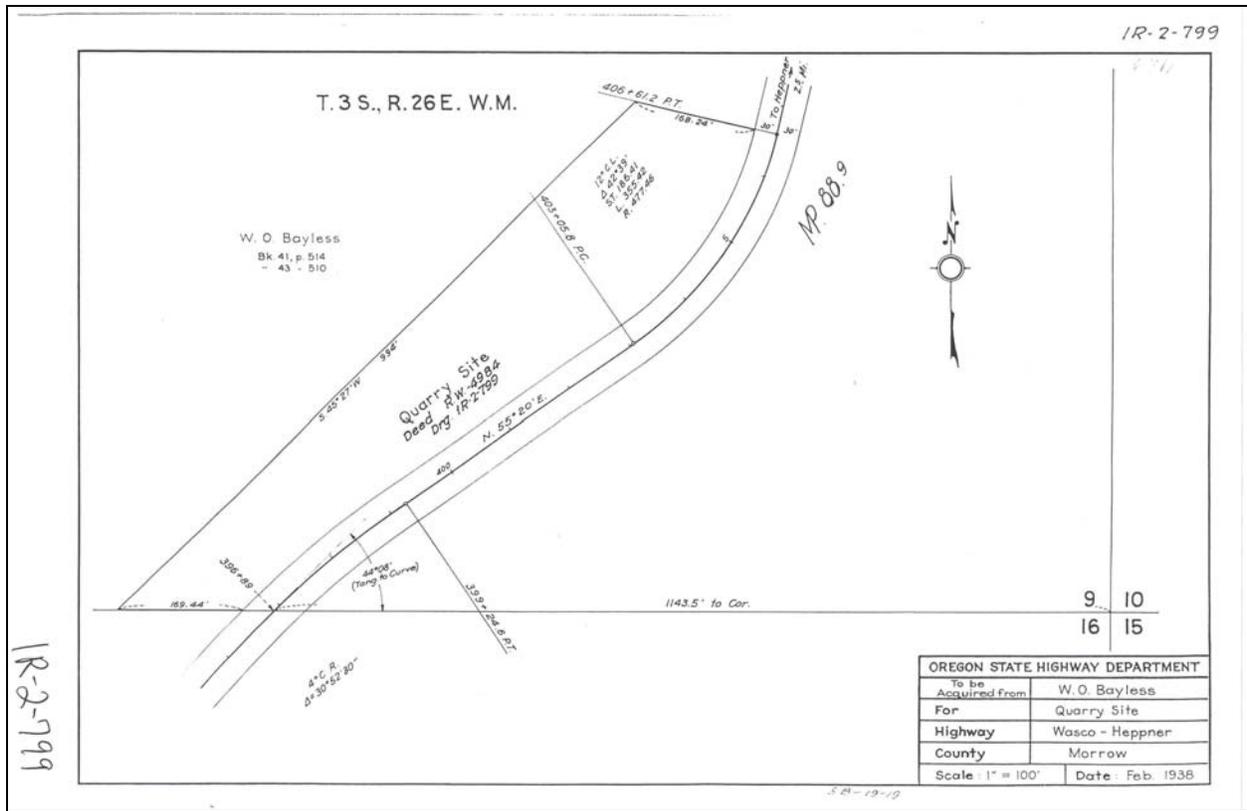
NE



View of the long and narrow quarry site located adjacent to Highway 206.



Close-up view of the highly fractured basalt found at this location.



Aerial view of the long and narrow quarry site located adjacent to Highway 206.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Morrow					12	0320	9.98	01N	26.0E	20
File ID		Source #	Date Visited	Map #		Type of Site				
03229, 03230		25-021-5	07/26/2000	1R-1-1556		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
45 33'01.76661"	119 35'53.94935"	378.188	6.28	<1						
Comments										
GPS acquired next to the pit.										
Rock Type	Unit	Color		Weathering		Jointing				
Basalt	Tcw	Medium Dark Grey (N4)		Slight		Highly Fractured				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good to Fair			R3-	166	65,000	145,665				
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	NA					
Adjacent Land Use										
Farming and one home 500 meters to the east.										
Remarks										
This is a small site southeast of Highway 207. The access to the site is not there any more (wheat field). I visited the site via private drive. The rock is a fine-grain highly fractured slightly weathered basalt. Some of the basalt is vesicular and the upper 10 to 15 feet will have stronger weathering. There is limited room to work and limited screening. You can rip the material. The terrain is fairly flat.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

N

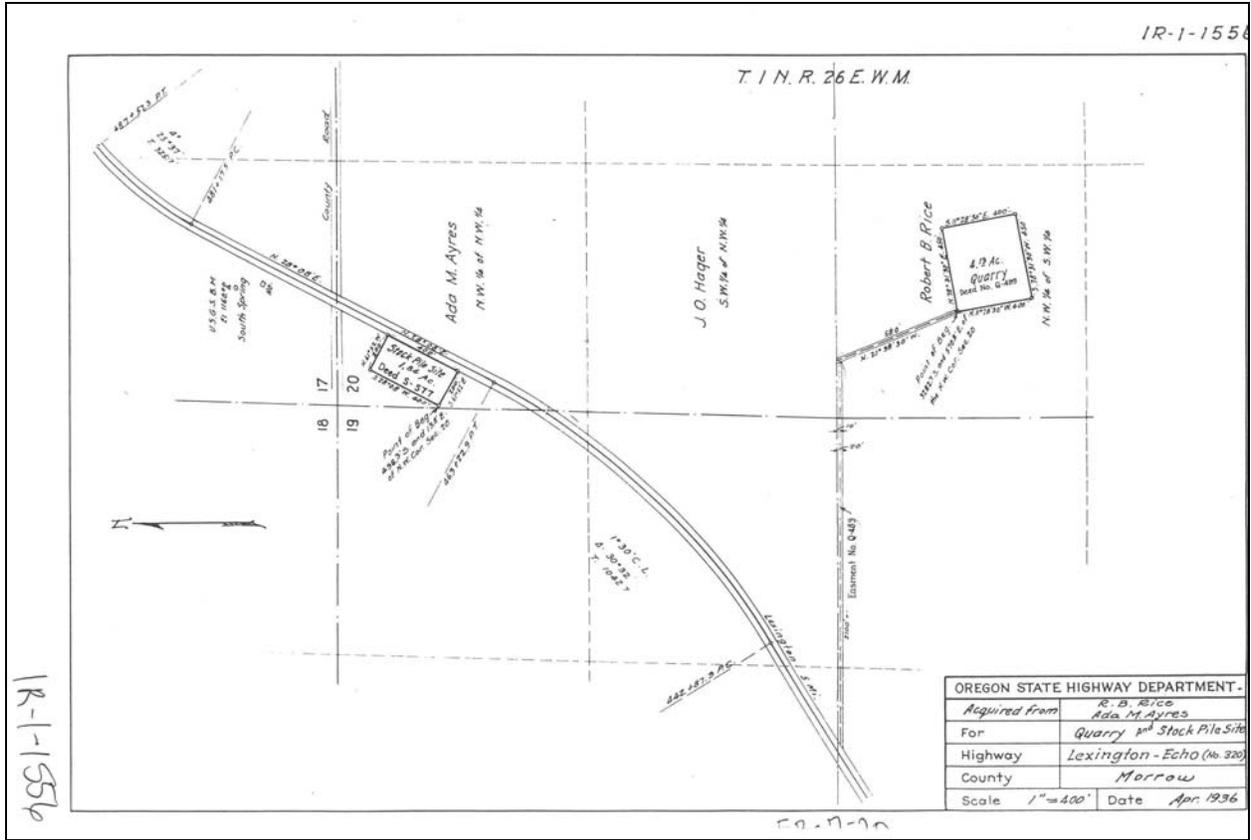
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View of the small quarry site located southeast of Highway 207.



Close-up view of the material found at this site.



Aerial view of the quarry site located east of Highway 207.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Morrow					12	0321	7	04S	25.0E	27
File ID		Source #	Date Visited	Map #		Type of Site				
11151		25-022-5	07/27/2000	1R-2-1410		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
45 11'17.68504"	119 41'47.53334"	1018.523	6	<1						
Comments										
GPS acquired at access gate.										
Rock Type	Unit	Color		Weathering			Jointing			
Basalt	Tcg	Medium Dark Grey (N4)		Fresh			Highly Fractured			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good			R3+	169	100,000	228,150				
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	NA					
Adjacent Land Use										
Open space/Farming										
Remarks										
This site is adjacent to and east of Highway 207. The rock is a fine-grain highly fractured basalt. The site has very limited room to work and no screening. You can rip the material into cobble size pieces. The terrain slopes up from the road about 10 degrees.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

NW

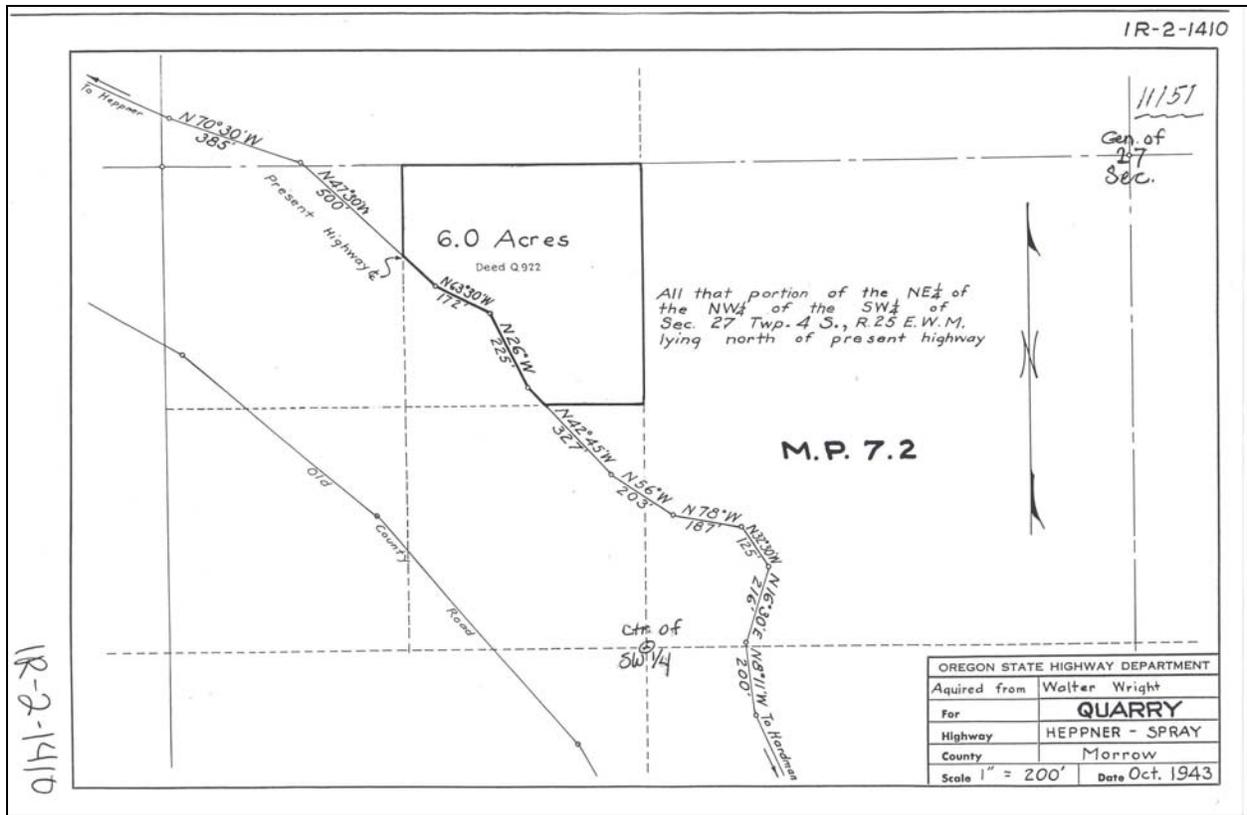
SE



View of the quarry site.



Close-up view of the highly fractured pit face at the quarry site.



Aerial view of the quarry site located north of Highway 207.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Morrow	Cecil Quarry				12	0321	10.2	05S	25.0E	11
File ID		Source #	Date Visited	Map #			Type of Site			
15877		25-023-5	07/27/2000	1R-2-1978			Raw Land			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
45 09'10.47000"	119 40'23.13000"	1039	4.19	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
Basalt	Tcg	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good			NA	120						
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	NA					
Adjacent Land Use										
Open space										
Remarks										
This a long narrow site west of Highway 207. Right of Way has removed most of the ground and there is no access to this site from the highway. The terrain slopes up from the highway about 20 degrees. There would be no room to work and no screening from the highway. The highway is situated above the site.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



View of the raw land site looking west across Highway 207.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Morrow				12	0321	13.98	05S	26.0E	19
File ID		Source #	Date Visited	Map #			Type of Site		
15878		25-025-5	07/27/2000	1R-2-1980			Raw Land		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
45 07'00.30000"	119 37'53.82000"	1035	2.29	NA					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
Basalt	Tcg	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
NA			NA	120					
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			Closed	Adjacent to Rock Creek				
Adjacent Land Use									
Open Space/Ranch across the highway to the southwest about 400 meters									
Remarks									
This is a narrow and small site adjacent to the north of Highway 207. The material was removed from the talus slope in the past. This site is all over grown with vegetation and has a wetland environment at the base of the slope, next to the creek. This site has mitigation potential. There is no screening from the highway and no room to work.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

N

E



View of the raw land site with a small disturbance that is adjacent to Highway 207.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Morrow					12	0321	17.5	06S	26.0E	06
File ID		Source #	Date Visited	Map #		Type of Site				
24724		25-026-5	07/27/2000	1R-5-871		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
45 04'30.46406"	119 39'15.78160"	1120.114	5.63	<1						
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color		Weathering		Jointing				
Pyroclastics	Tsfj	Light Olive Grey (5Y 5/2)		Decomposing		Highly Fractured				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Poor			R2-	151						
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	NA					
Adjacent Land Use										
Open space										
Remarks										
This site is adjacent to and east of Highway 207. The material is a fine-grained decomposing pyroclastic rock. The rock breaks into very small pieces. There would be a lot of fines from this rock and I would not recommend its use for anything. County records only show us as the owners for the Right of Way along this stretch of road.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

N

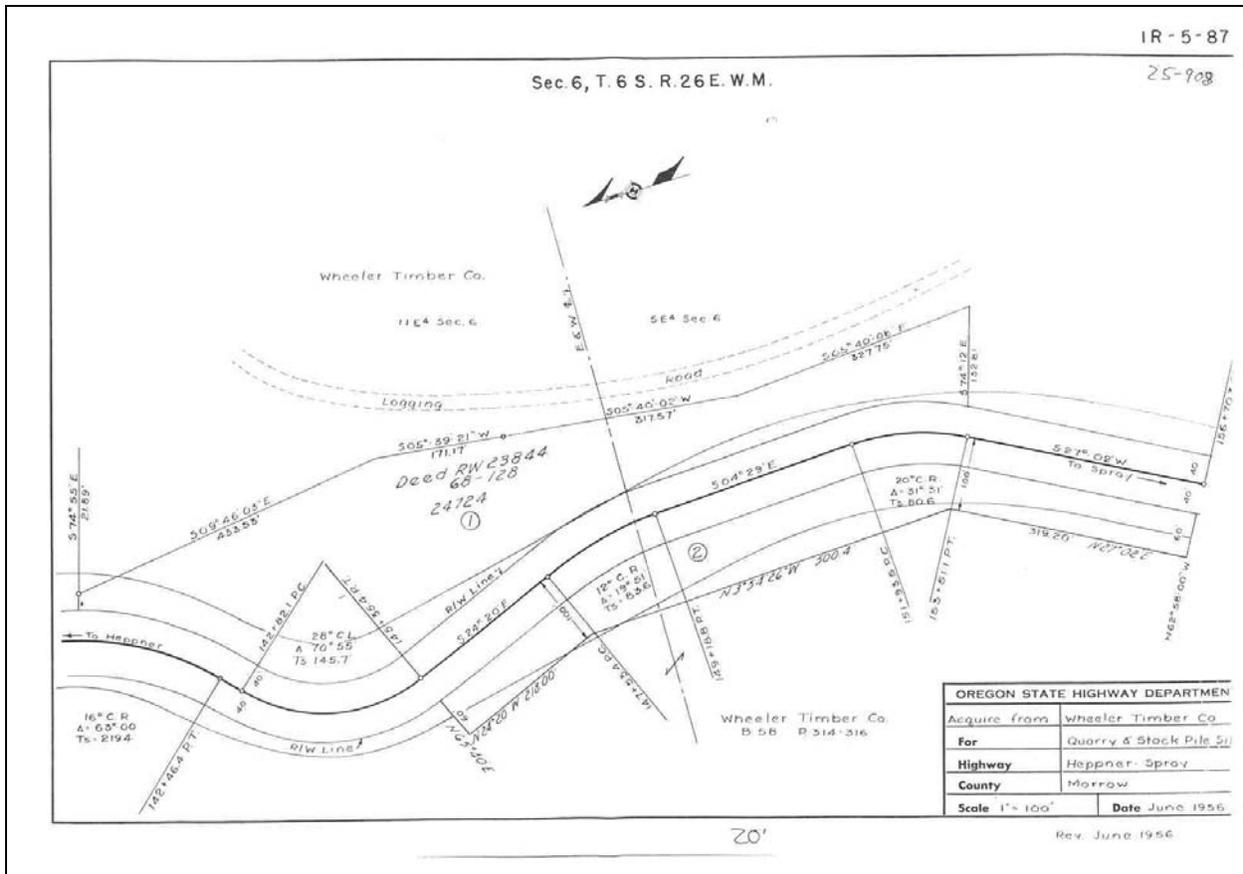
S



View looking east across Highway 207 at the quarry site.



Close-up view of the pyroclastic rock found at this site.



Aerial view of the quarry site located adjacent to and east of Highway 207.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Morrow					12	0052	19.3	01N	23.0E	22
File ID		Source #	Date Visited		Map #			Type of Site		
Q0144		25-031-5	07/25/2000		1R-1-567			Quarry		
Latitude		Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
45 33'13.01616"		119 55'05.55596"	247.143	7.89	<5		25-0047			
Comments										
GPS acquired along the County Road and the pit.										
Rock Type		Unit	Color		Weathering			Jointing		
Basalt		Tcw	Medium Dark Grey (N4)		Fresh to Decomposing			Massive to Highly Fractured		
Quality				Hardness	lbs./cu ft.	Reserve (cy)		Reserve (Tons)		
Good to Fair				R3+	162	100,000		218,700		
Potentially Significant Site		Why			Open/Closed		Direction			
No		NA			Closed		West about 400 meters is Willow Creek			
Adjacent Land Use										
Open space/Farming										
Remarks										
This site is adjacent to the east along Highway 74 and Morgan East Road. There is no access to the quarry by vehicle anymore. The basalt here is composed of variable flows, with some being fine-grain excellent rock, and others that are a decomposing vesicular. You can rip the material. There is some room to work, but limited screening. The terrain is gradual. Most of the rock is good quality material.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
	2.87			1.7						
Material Use										
Rip Rap (1986)										

W

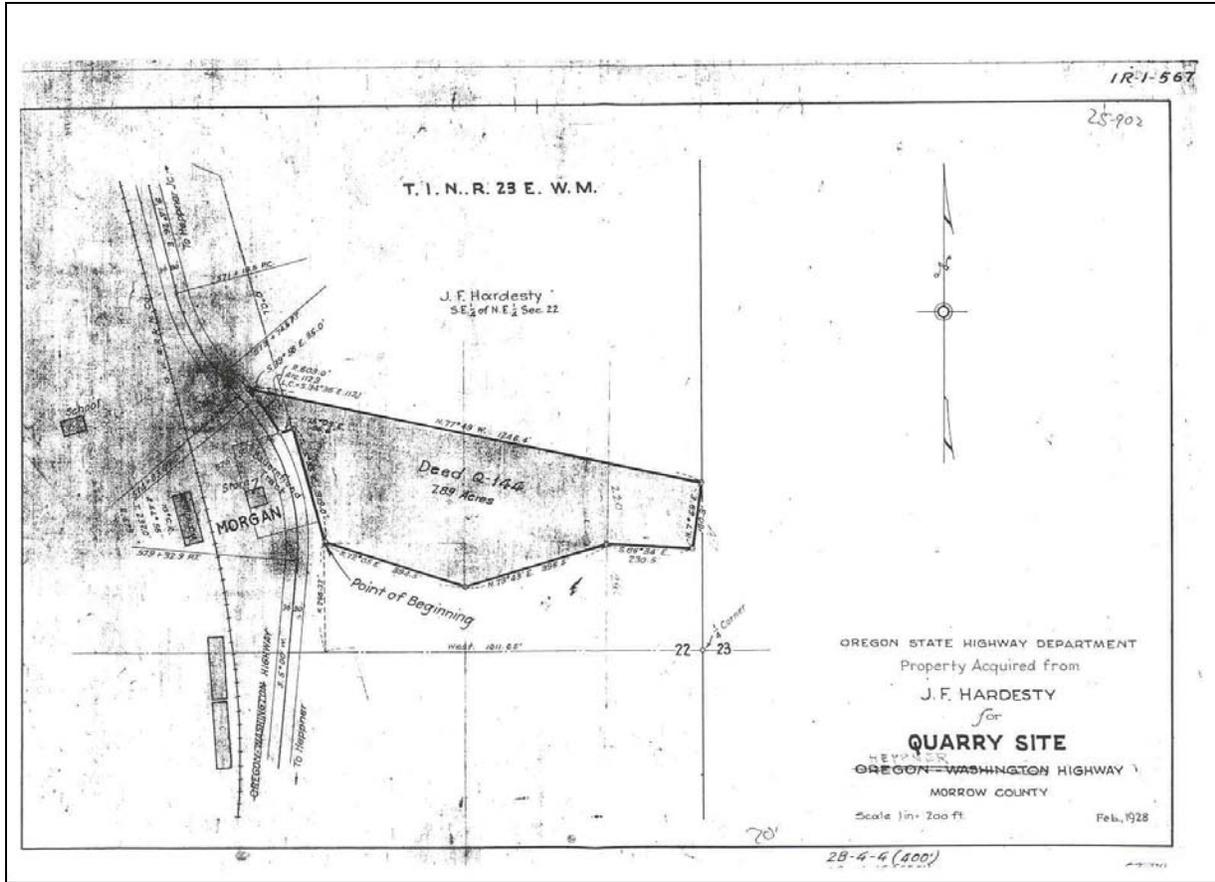
NE



View of the quarry site along Morgan East Road.



Close-up view of the massive to highly fractured basalt found at this site.



Aerial view of the quarry site located off of Morgan East Road.

County	Site Name		Dist	Hwy	Mile Pt	TWP	RGE	Sect
Morrow			12	0320	0.5	01S	25.0E	27, 26
File ID	Source #	Date Visited	Map #			Type of Site		
11154A, 11154, 18716	25-035-5	07/25/2000	1R-2-1522, 1R-5-212, 1R-2-1408, 1R-5-212			Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #			
45 27'15.47706"	119 40'40.20044"	481.83	11.6	<2				
Comments								
GPS acquired in the first pit.								
Rock Type	Unit	Color		Weathering		Jointing		
Basalt	Tcg	Medium Dark Grey (N4)		Slight		Massive to Highly Fractured		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)		
Good			R3	175	100,000	150,000		
Potentially Significant Site	Why			Open/Closed	Direction			
No	NA			Closed	NA			
Adjacent Land Use								
Farming/open space/one home to the northeast approximately 500 meters								
Remarks								
This site is just north of the town of Lexington and adjacent to the east of Highway 207. The rock is a fine-grain highly fractured, slightly weathered basalt. Some of the rock can be massive. The top five to six feet can have stronger weathering. The ground is used for waste rock now. Also, the site is below the highway on gradually sloping terrain. There is no screening, but room to work.								
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.
Material Use								

NW

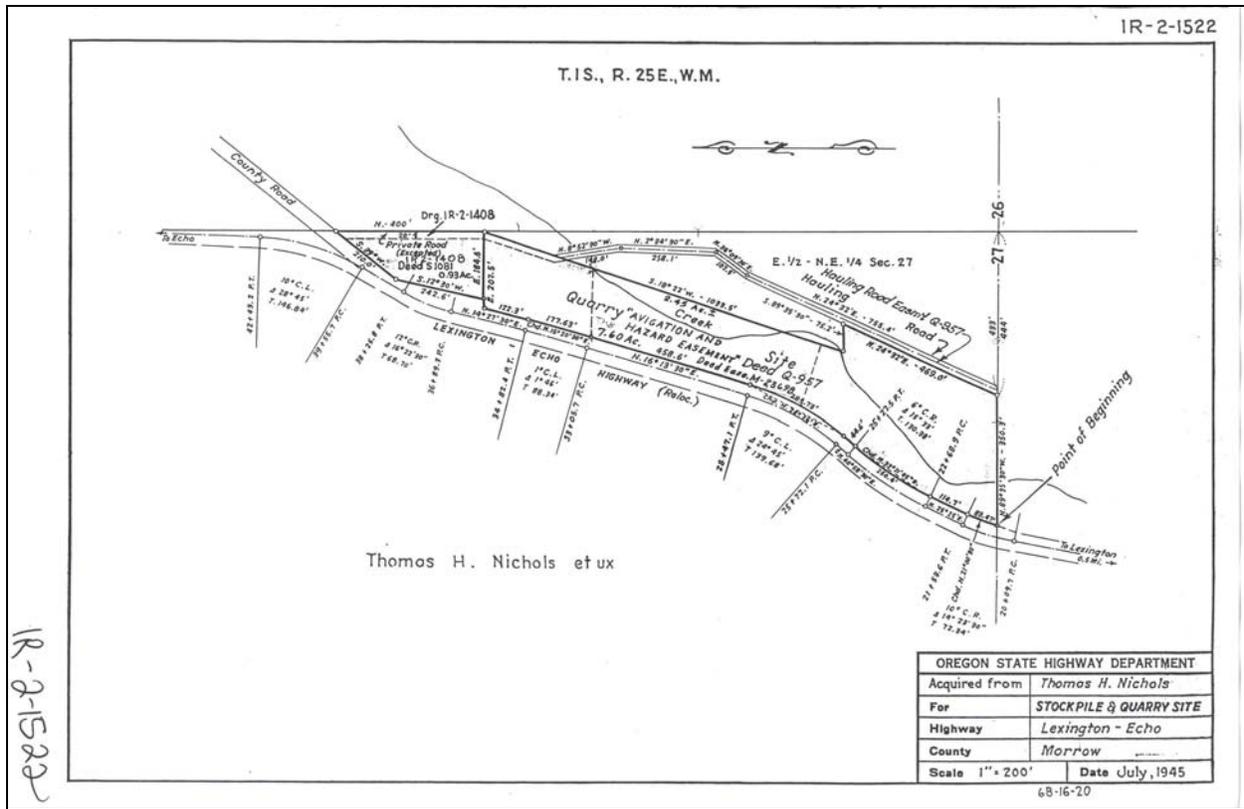
E



View of the quarry site located just north of Lexington, OR and adjacent to and east of Highway 207.



Close-up view of the massive to highly fractured basalt found at this site.



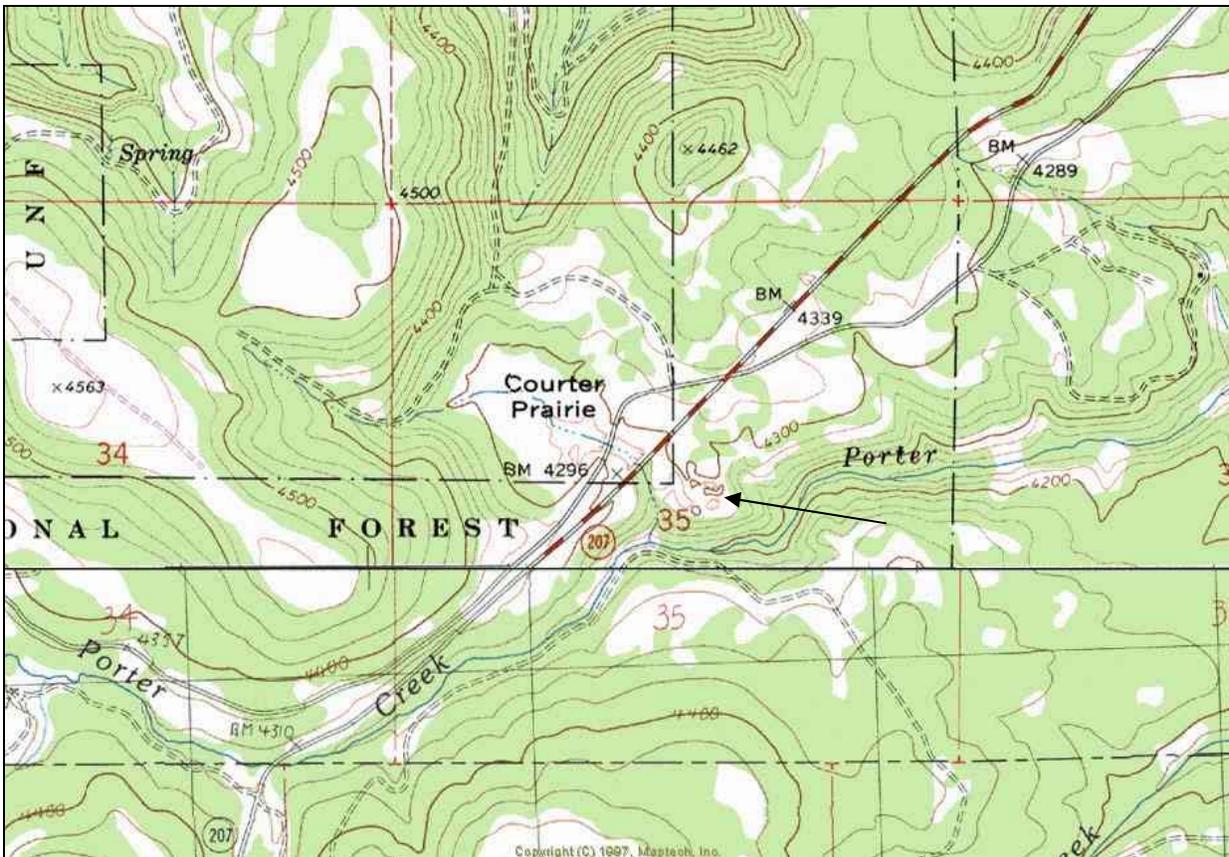
Aerial view of the quarry site located adjacent to and east of Highway 207.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Morrow				12	0321	11.61	05S	25.0E	14
File ID		Source #	Date Visited	Map #			Type of Site		
15875		25-042-5	07/27/2000	1R-2-1979			Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
45 08'06.98989"	119 39'59.28198"	973.164	5.6	<1		25-0064			
Comments									
GPS acquired in the pit.									
Rock Type	Unit	Color		Weathering			Jointing		
Basalt	Tcg	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
NA			NA	155					
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			Closed	South about 100 meters is Rock Creek				
Adjacent Land Use									
Open space									
Remarks									
This site is adjacent to and north of Highway 207. The basalt is being removed from a talus slope at the base of a 300 plus foot slope/cliff. I strongly recommend that we stop removing material from this site. Every time we remove material from the toe of the slope we jeopardize the next persons safety. A second bench has been constructed above the base of the site. This is very dangerous and should stop immediately. We can use the ground for a waste/stock pile/stage area.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

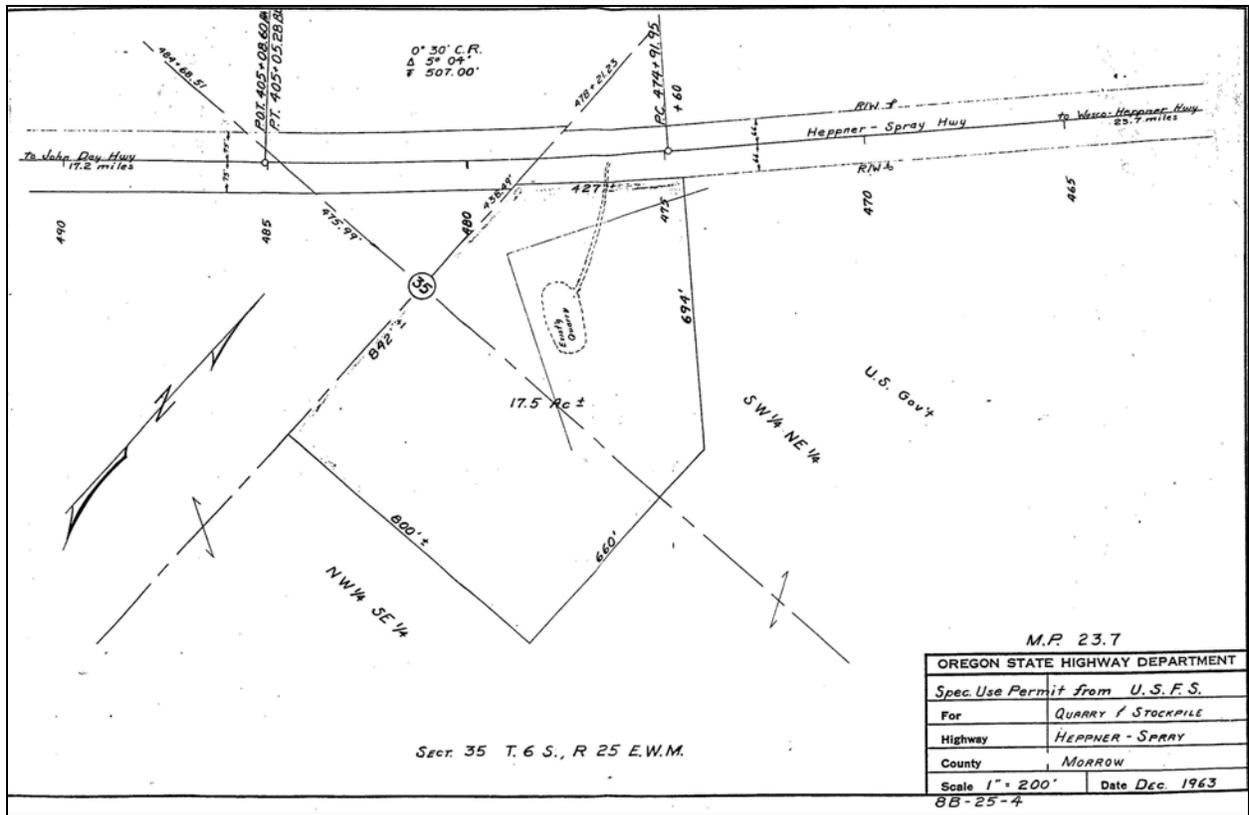


View of the quarry site that is located adjacent to and north of Highway 207.

County	Site Name		Dist	Hwy	Mile Pt	TWP	RGE	Sect	
Morrow			12	0321	23.7	6S	25.0E	35	
File ID	Source #	Date Visited		Map #			Type of Site		
6005-024	25-045-5	NA		8B-25-4			Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #				
45 0' 07.98000"	119 41'44.24000"	1303.96	17.5	6					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
Basalt		Grey		Slight to Fresh			Blocky		
Quality			Hardness	lbs./cu ft.	Reserve (cy)		Reserve (Tons)		
Good			R3+	120	200,000		300,000		
Potentially Significant Site	Why			Open/Closed		Direction			
No	USA Ground			Open		Adjacent and 50 meters east of the the highway			
Adjacent Land Use									
Forest Land									
Remarks									
This site was not visited. It is located adjacent to Highway 207, north of the Wheeler/Morrow County line. Quantity calculations were provided by Region 5 Geologist, Dave Brooks. The ODOT lease from the Forest Service expires August 31, 2004.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
2.784	2.834	15.1	6.0	2.0	12.2	7.0	15.2	12.7	
Material Use									
Quarry Rock (1999)									



USGS topographic map of the quarry site located adjacent to Highway 207.



Aerial view of the Forest Service owned quarry site located adjacent to Highway 207.

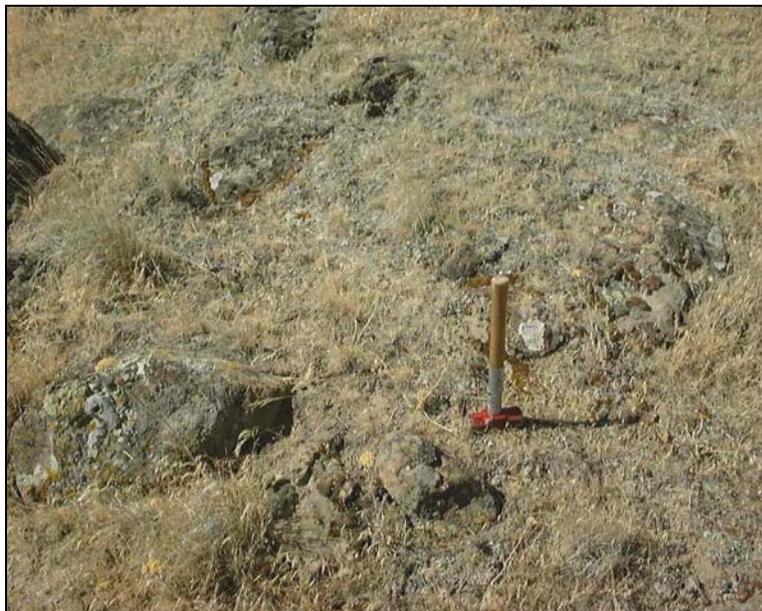
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Morrow					12	0002	0	04N	23.0E	20
File ID		Source #	Date Visited	Map #		Type of Site				
17481		25-901-5	07/25/2000	1R-5-127		Raw Land				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
45 48'41.98090"	119 58'07.49457"	84.647	84.4	NA						
Comments										
GPS acquired at the boat ramp.										
Rock Type	Unit	Color	Weathering		Jointing					
Basalt	Ts	NA	NA		NA					
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good			NA	120	160,000	259,200				
Potentially Significant Site	Why			Open/Closed	Direction					
No	USA Ground			Closed	Adjacent to the Columbia River					
Adjacent Land Use										
Park/Boat ramp										
Remarks										
This site is north of I-84 and south of the Columbia River. There is a boat ramp and primitive camp ground on the site now. The rock is a heterogeneous mix of size and lithology. There are minor amounts of gravel with Columbia River Basalts below to depth. You would have a choice to remove gravel or basalt. The Rail line bisects the ground also. USA property										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

SW

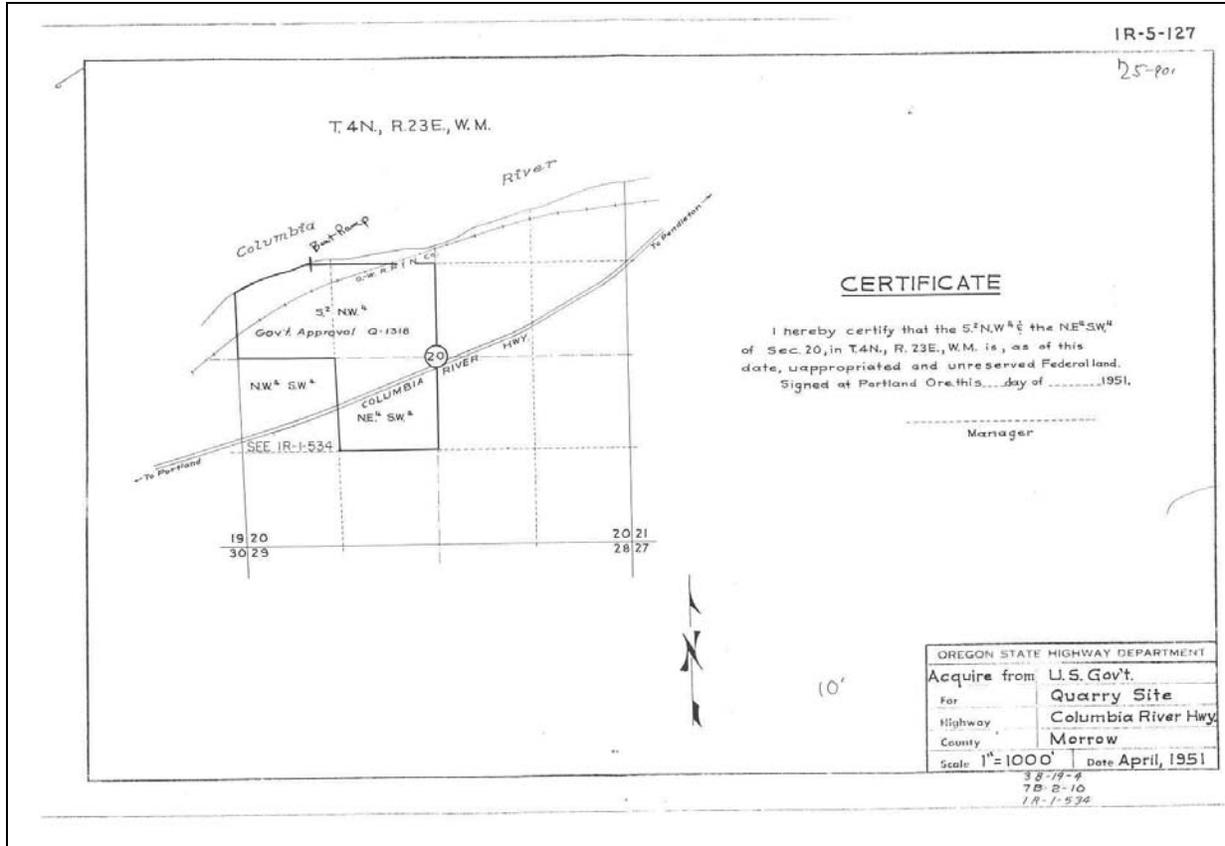
NW



View of the raw land site north of I-84 and south of the Columbia River.



Close-up view of the material found at this site.



Aerial view of the raw land site that is now a boat launch and primitive campground.

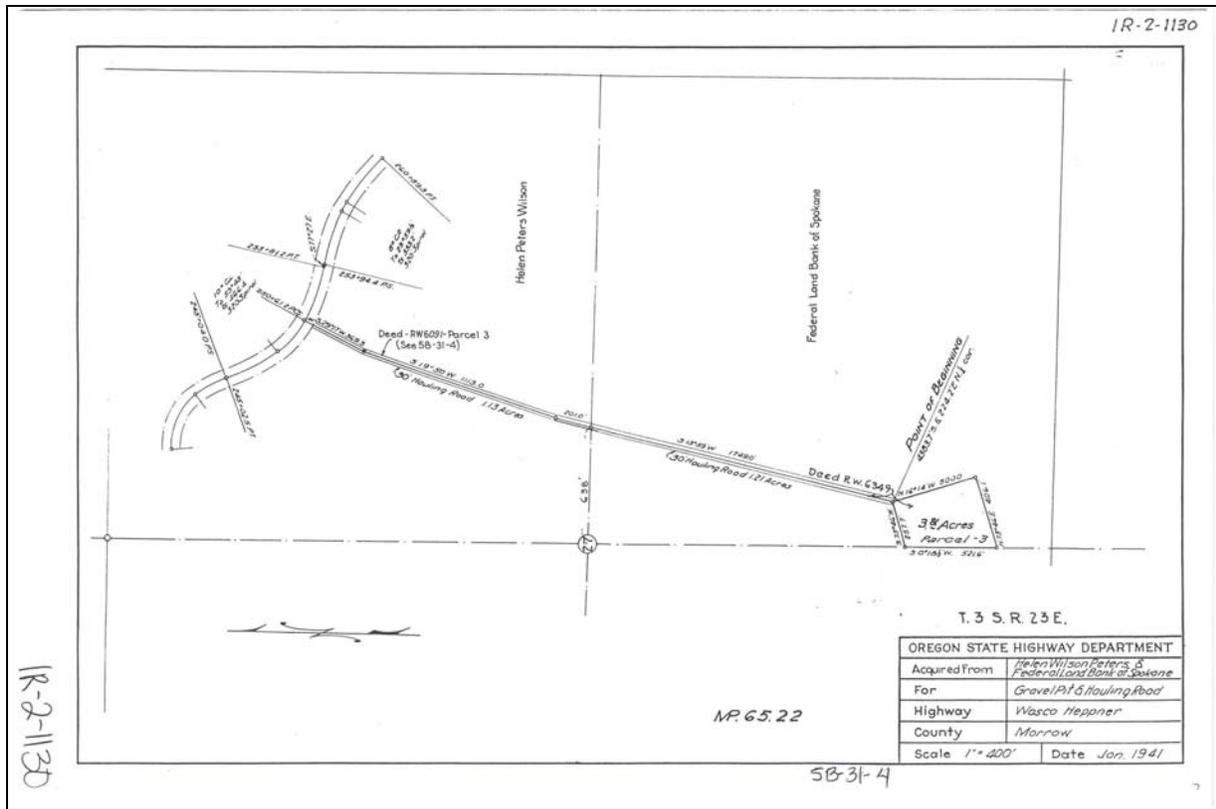
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Morrow				12	0300	59.60	03S	23.0E	27
File ID		Source #	Date Visited	Map #			Type of Site		
08932		25-905-5	07/02/2000	1R-2-1130			Raw Land		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
45 16'22.31000"	119 55'59.20000"	729	3.81	NA					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
Basalt	Tcg	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Poor			NA	120					
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA				NA				
Adjacent Land Use									
Remarks									
This is raw land south of Highway 206 about .75 miles. This would be a borrow site of no importance. There are small exposes of basalt to the west, but I am not sure if it is on our ground. The material in the draw is composed of silt and sand. The terrain is flat. Site should be surplused.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

SW

NW



View of the raw land site approximately 0.75 miles south of Highway 206.



Aerial view of the raw land site located south of Highway 206.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla	Kennedy Pit			12	0002	183.2	05N	28.0E	16
File ID		Source #	Date Visited	Map #			Type of Site		
13301		30-001-5	08/10/2000	1R-2-1686			Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
45 54'58.67201"	119 18'59.79424"	121.774	20	<4		30-0060			
Comments									
GPS acquired in the pit.									
Rock Type	Unit	Color	Weathering			Jointing			
Basalt/Gravel	Tcs/Qgs	NA	NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Good			NA	155	360,000	753,300			
Potentially Significant Site	Why			Open/Closed	Direction				
Yes	Good Quantity/Quality			Closed	NA				
Adjacent Land Use									
Industrial									
Remarks									
This site is south of Highway 730 and east of I-82. The material here is a heterogeneous mix of lithologies and sizes. They range from gravel on top to the Columbia River Basalts below. There is approximately 40% gravel to 60% sand by volume exposed in the pit. The dominant size is small cobble (~10cm). There is good screening with ample room to work. Since this site is located on a hill you could mine the basalt at depth. This site is adjacent to a private quarry.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

SW

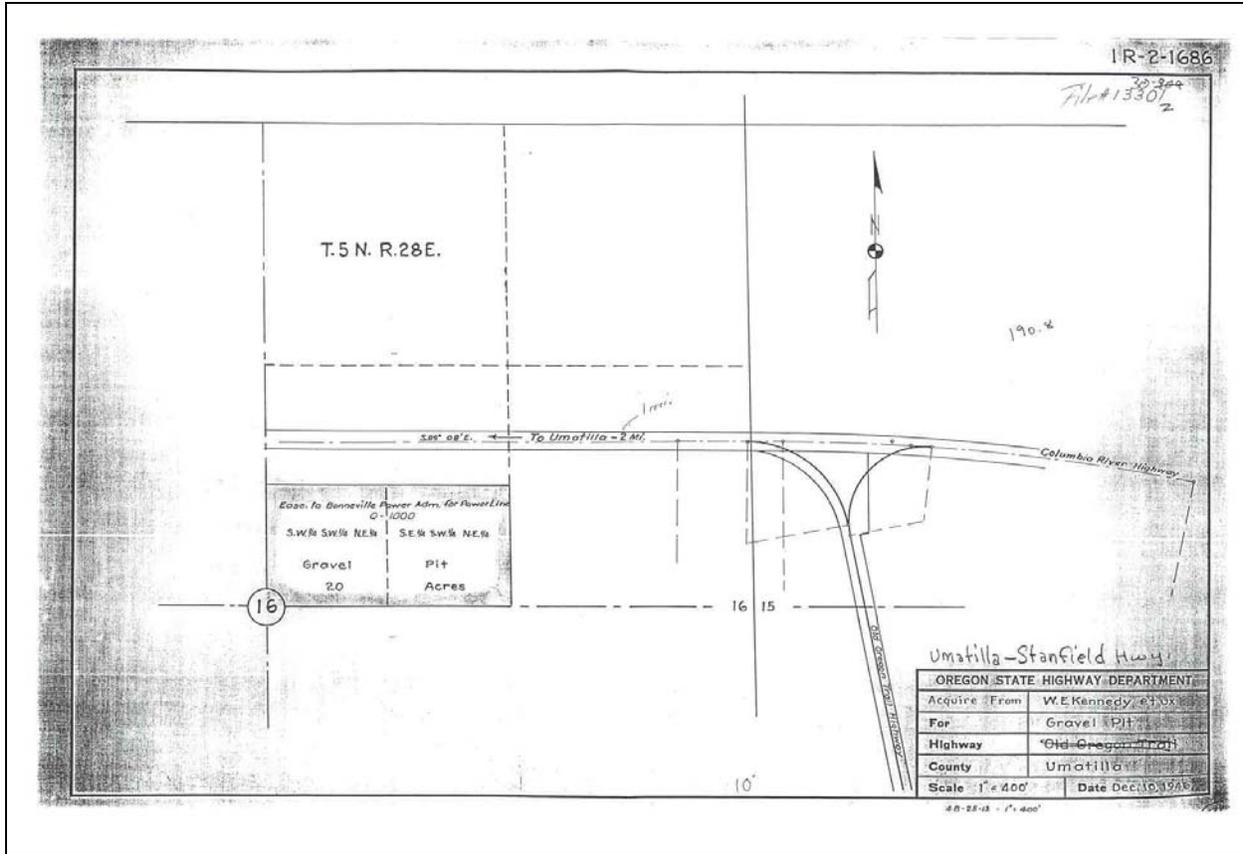
S



315° view of the large quarry site located south of U.S. Highway 730 and east of I-82.



Close-up view of the gravel at this quarry site.



Aerial view of the large quarry site located adjacent to I-82 and U.S. Highway 730.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla					12	0002	190	05N	29.0E	22
File ID		Source #	Date Visited	Map #		Type of Site				
Q0225, Q0268		30-003-5	08/10/2000	1R-1-675		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
45 54'11.30330"	117 10'21.81555"	131.95	70	<4	30-0033					
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color		Weathering		Jointing				
Basalt	Tcs	Medium Dark Grey (N4)		Fresh		Highly Fractured				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good to Very Good			R3-	177	1,500,000	3,584,250				
Potentially Significant Site	Why			Open/Closed	Direction					
No	USA Ground			Closed	NA					
Adjacent Land Use										
Open space										
Remarks										
This site is adjacent to and north of U.S. Highway 730 and the junction with Highway 207. The rock is a brittle, fine-grain, highly fractured basalt. There is no screening and ample room to work. You can rip the basalt but should drill and blast. The terrain is fairly flat with no overburden. This is BLM ground.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.770	2.82	14.6	3.5	1.0	9.1	0.1	15.2	.2		
Material Use										
Quarry Rock (1995)										

W

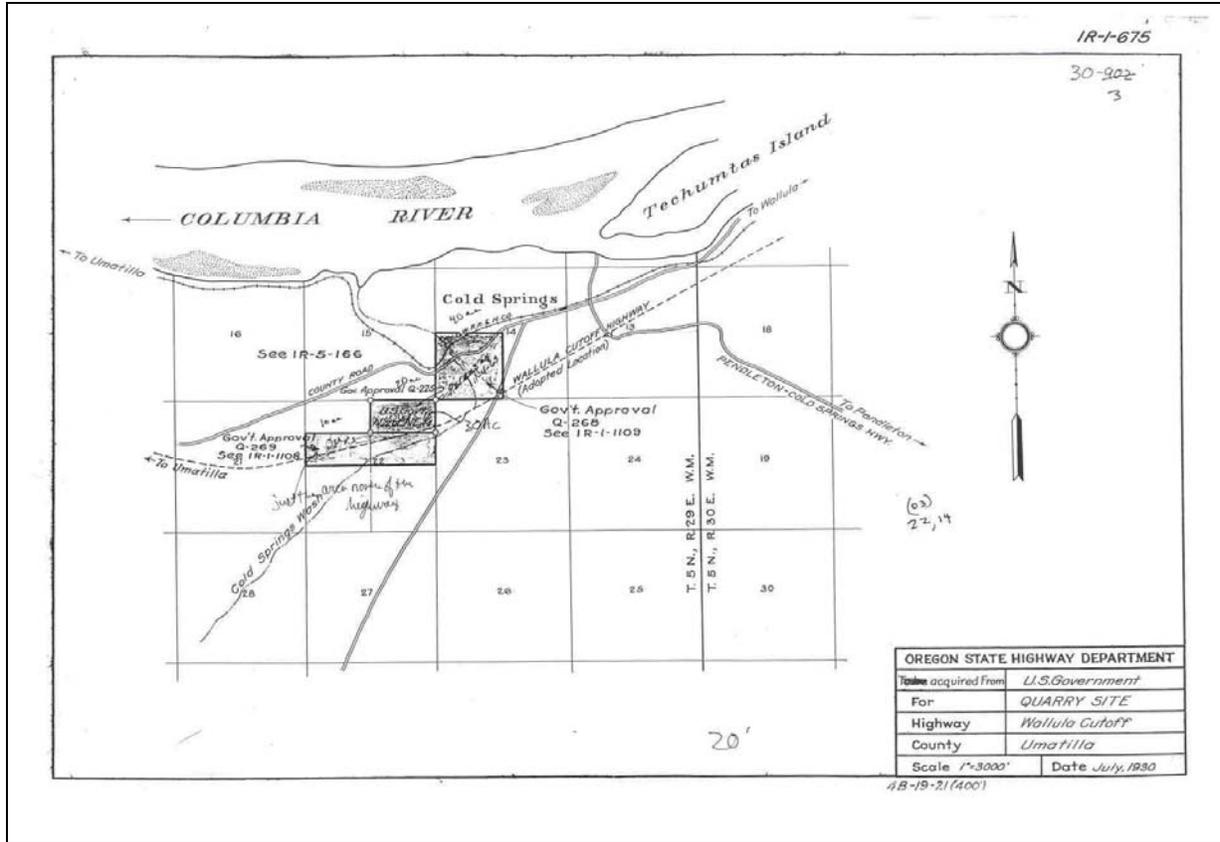
E



View of the large quarry site near the junction of U.S. Highway 730 and Highway 207.



Close-up view of the highly fractured basalt found at this site.



Aerial view of the large quarry site at the junction of U.S. Highway 730 and Highway 207.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla					12	0006	179.20	04N	27.0E	26
File ID		Source #	Date Visited	Map #		Type of Site				
09404		30-004-5	06/11/2001	1R-2-1176		Borrow				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
45°47'41.61000"	119°24'00.68000"	183	40	<12						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color	Weathering		Jointing					
Volcanic/Metamorphic Gravel	Qgs	NA	NA		NA					
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good			NA	120	320,000	518,400				
Potentially Significant Site	Why			Open/Closed	Direction					
No	USA Ground.			Closed	NA					
Adjacent Land Use										
Farming										
Remarks										
This site is located south of I-84 about 100 meters. The material is composed of volcanic and metamorphic gravel (60%) and sand/silt (40%). There is ample room to work with no screening. The site has a sign but is not fenced or gated. The ground is adjacent to the local farmers' field. 360,000 cubic yards removed										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

S

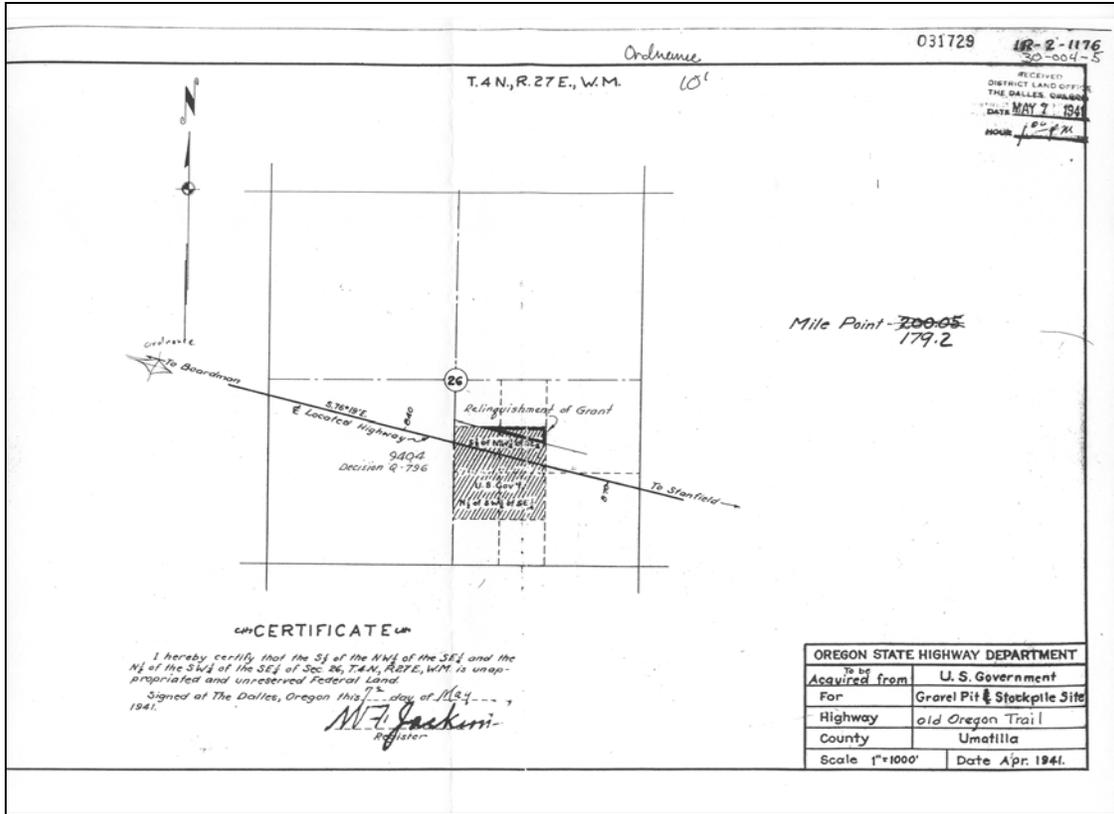
NW



View of the borrow site located south of I-84 about 100 meters.



Close-up view of the material found at the borrow site located near I-84.

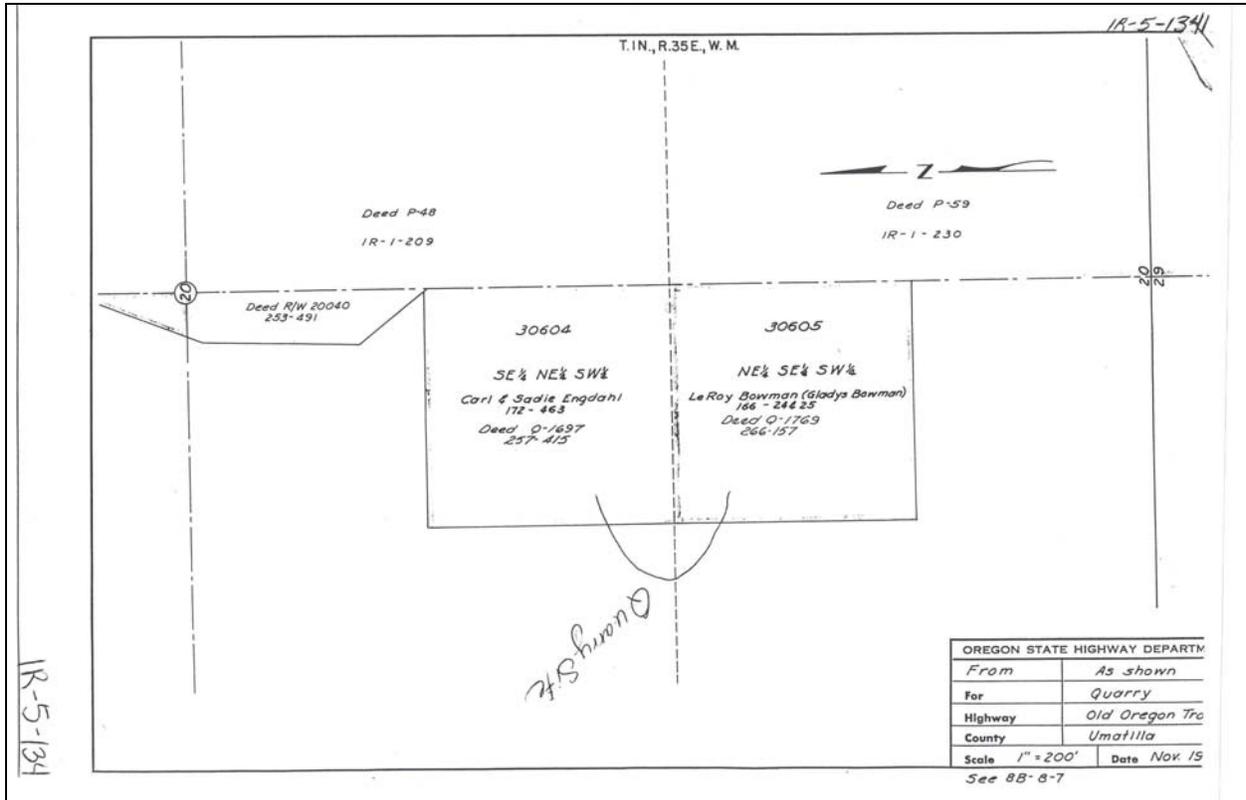


Aerial view of the borrow site located south of I-84.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla				12	0006	232.9	01N	35.0E	20
File ID		Source #	Date Visited	Map #			Type of Site		
30605, 30604		30-014-5	08/15/2000	1R-5-1341			Stock Pile Site		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
45 32'49.17000"	118 28'02.05000"	1180	20	NA					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
NA	Tcw	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
NA			NA	120					
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			NA	NA				
Adjacent Land Use									
Open space/State Park									
Remarks									
This site is used as a waste site and bone yard. There was some surface water still in the pit, about 10 meters square. The pit is almost filled in. Emigrant Springs State Park is adjacent to the south.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									



Aerial view of the stock pile site with a small pond.



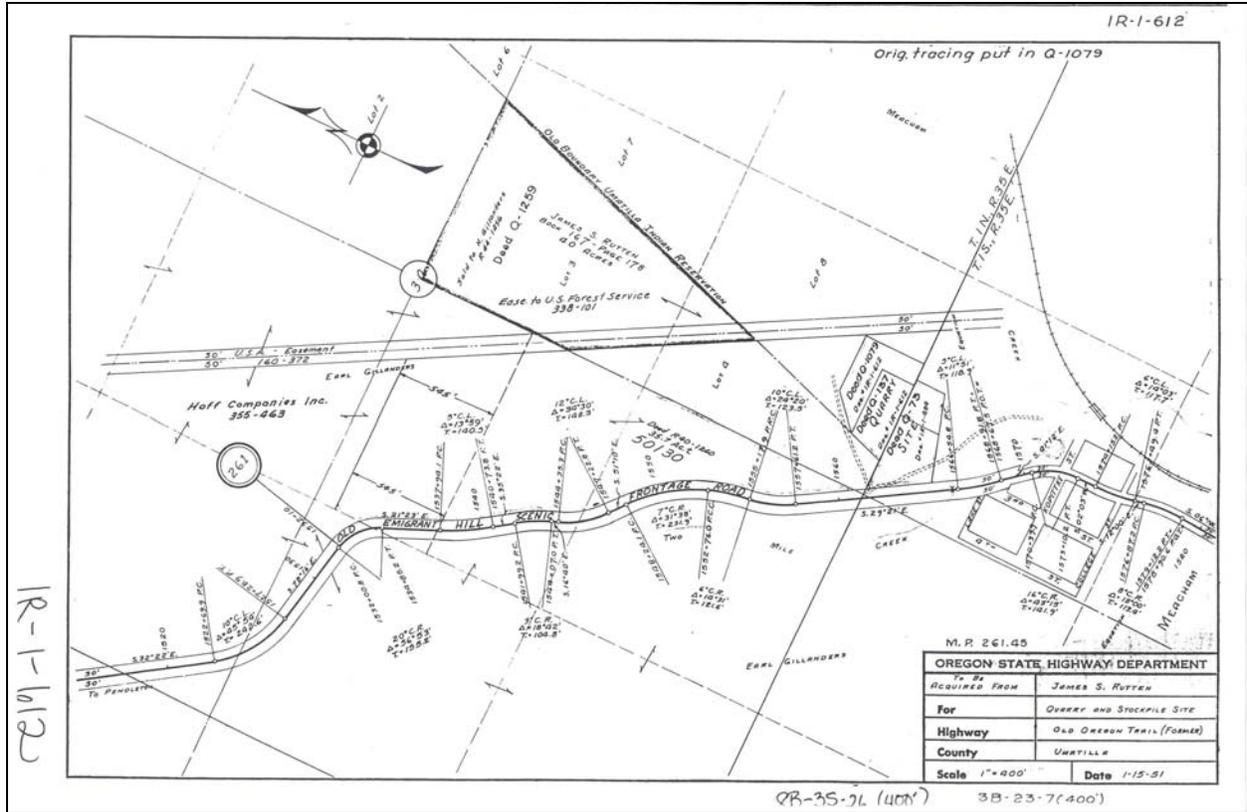
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla	Meacham Quarry			12	0006	237.3	01S, 01N	35.0E	03, 34
File ID		Source #	Date Visited	Map #			Type of Site		
17177,50130, 14216, Q0137, Q0073		30-015-5	08/15/2000	1R-1-484, 1R-1-612			Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
45 31'08.12420"	118 25'33.75704"	1137.532	52.09	<10		30-0018			
Comments									
GPS acquired in the pit.									
Rock Type	Unit	Color		Weathering			Jointing		
Basalt	Tcs	Medium Grey (N5)		Fresh			Highly Fractured		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Good to Fair			R3+	165	1,200,000	1,800,000			
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			Closed	Adjacent to Two Mile Creek				
Adjacent Land Use									
Town of Meacham is adjacent to the southwest									
Remarks									
This site is located north of the town of Meacham. The rock here is a fine-grain, highly fractured basalt. There is limited screening with ample room to work. The material is slightly vesicular and has some weathered zones throughout. The terrain is fairly flat. Most of the rock seems to be used for a sanding source for I-84 at the summit of the Blue Mountains. There are high transmission power lines that bisect a portion of the property. A county road bisects the southern portion of the pit.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
2.64	2.71	16.3	2.2	1.6	0.7			16.5	
Material Use									
Base AC (1989)									



View of the quarry site located north of Meacham, OR.



Close-up view of the pit face at this site.



Aerial view of the quarry site located north of Meacham, OR.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla					12	0006	243.7	01S	35.0E	24, 25
File ID		Source #	Date Visited	Map #		Type of Site				
24089		30-016-5	08/17/2000	1R-5-803		Raw Land				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
45° 27' 37.43000"	118°23'07.90000"	1298	36.82	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering		Jointing				
Basalt	Tcg	Medium Grey (N5)		Slight		Highly Fractured				
Quality			Hardness	Lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good			R3	160	1,000,000	1,500,000				
Potentially Significant Site	Why			Open/Closed	Direction					
Yes	NA			Closed	NA					
Adjacent Land Use										
Open space										
Remarks										
This site is adjacent to and west of I-84. This site has no past disturbance with no developed access. The source number could have come from the roadcut at this location. The rock is a fine-grain moderately fractured basalt. There could be room to work, with limited screening from the highway. The ground is bound by pipelines on both the east and west sides.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.55	2.73	19.6	4.2	1.4			13.4	0.2		
Material Use										
1977										

SE

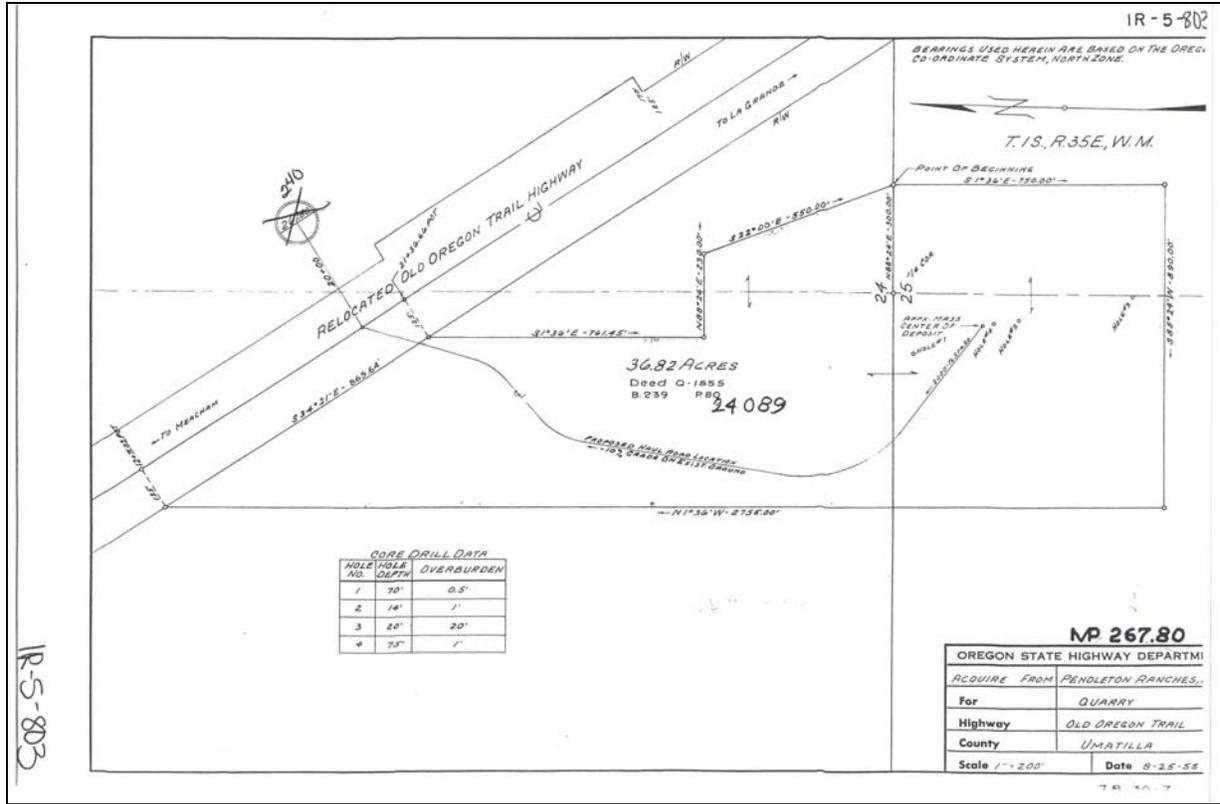
NW



View of the raw land site looking across I-84.



Close-up view of the rock wall at the site that is adjacent to I-84.



Aerial view of the raw land site located south of I-84.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla					12	0335	6.4	03N	33.0E	23
File ID		Source #	Date Visited	Map #		Type of Site				
07737, 26247, 25987		30-017-5	08/09/2000	1R-5-984, 1R-2-926		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
45 43'29.41768"	118 39'14.08174"	424.956	8.56	<5						
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color		Weathering			Jointing			
Basalt	Tcw	Medium Grey (N5)		Slight			Highly Fractured to Massive			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair to Good			R3-	170	160,000	367,200				
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	West about 200 meters is Wild Horse Creek					
Adjacent Land Use										
Farming										
Remarks										
This site is adjacent to and east of the Helix Highway, and north of Highway 11. The rock is a fine-grain highly fractured basalt. There is no screening with ample room to work here. The ground is used for waste material and stockpiling. The gate was open and it appears the public is dumping trash here. There are power lines adjacent to the east. The terrain is comprised of gradual rolling hills of about 3 degrees.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

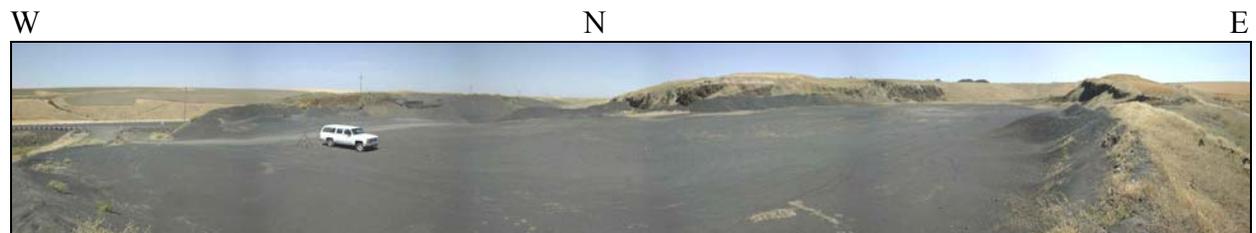


View of the quarry site located north of Highway 11 off of the Helix Highway.

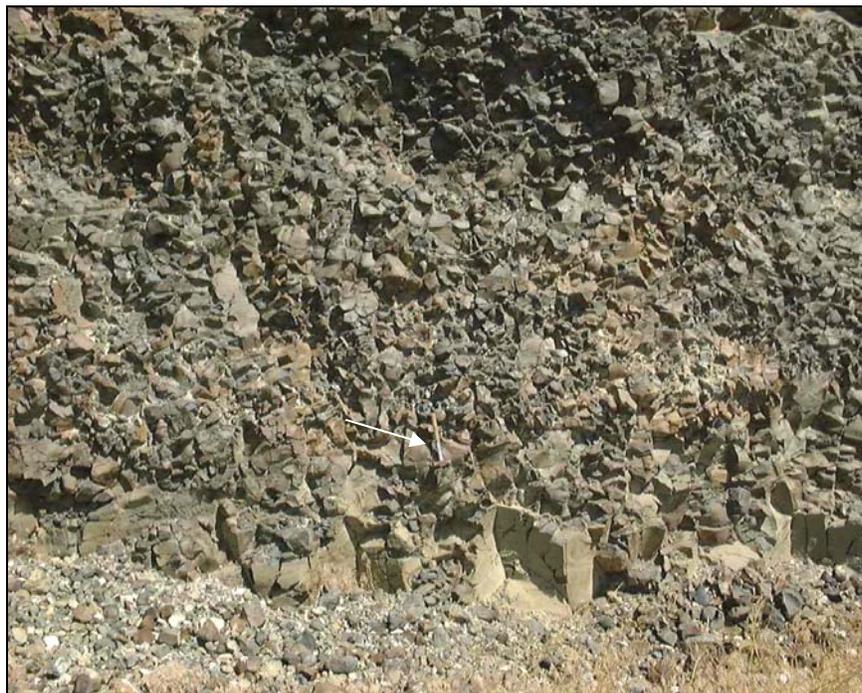


Close-up view of the fine-grain, highly fractured basalt found at this quarry site.

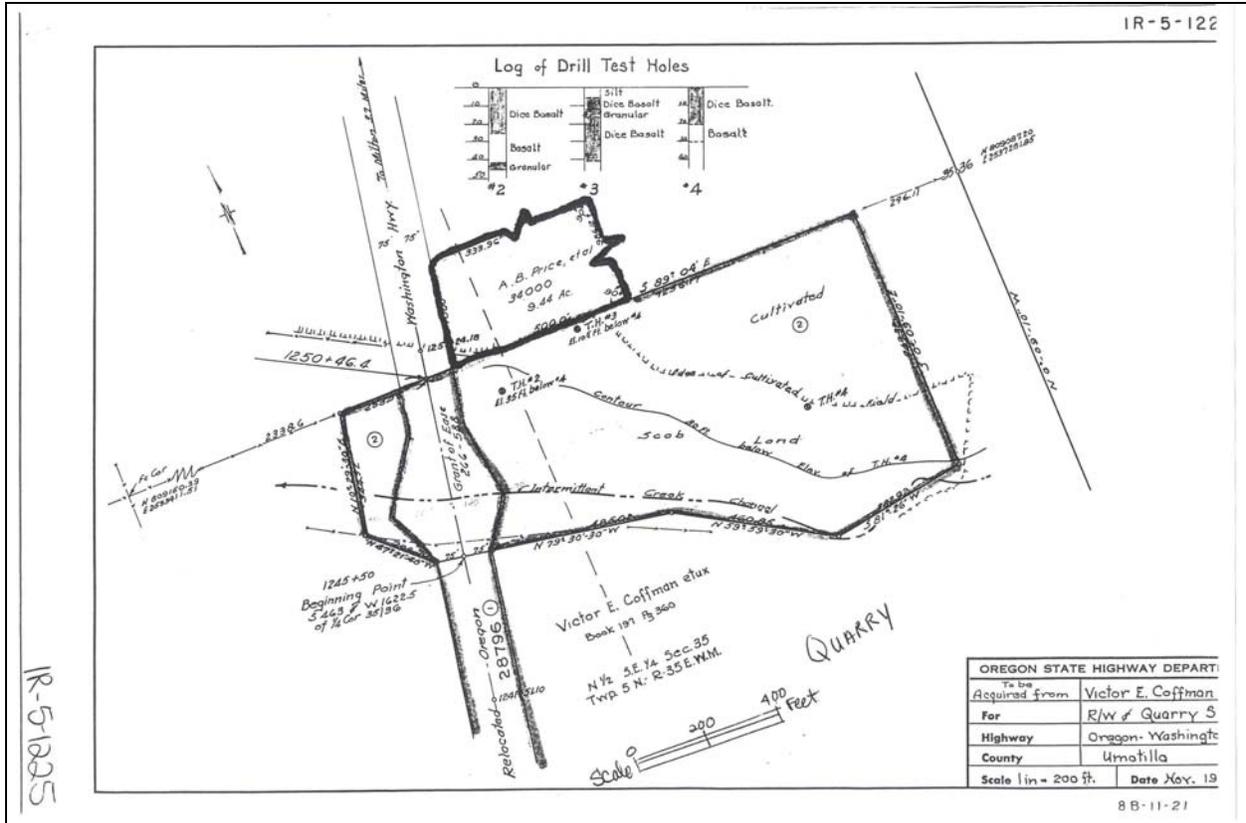
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla	Dry Creek				12	0008	22.9	05N	35.0E	35
File ID		Source #	Date Visited	Map #		Type of Site				
28796, 34000		30-019-5	08/09/2000	1R-5-1225		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
45 51'58.64635"	118 23'48.84338"	503.391	28.94	<5	30-0047					
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color		Weathering		Jointing				
Basalt	Tcw	Medium Dark Grey (N4)		Fresh to Slight		Highly Fractured				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good to Fair			R3	160	100,000	150,000				
Potentially Significant Site	Why			Open/Closed	Direction					
Yes	Large acreage, adjacent to Highway 11			Closed	NA					
Adjacent Land Use										
Farming										
Remarks										
This site is adjacent to and east of Highway 11. The rock is a fine-grain, highly fractured basalt. (classic dice rocks) There is some screening from the highway with plenty of room to work. Some of the ground has been reclaimed. There are some stockpiles in the pit. You can rip the material. The terrain is fairly flat.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.55	2.73	19.6	4.2	1.4			13.4	0.2		
Material Use										
(1977)										



View looking north at the quarry site that is located adjacent to and east of Highway 11.



Close-up view of the highly fractured basalt found at this quarry site.

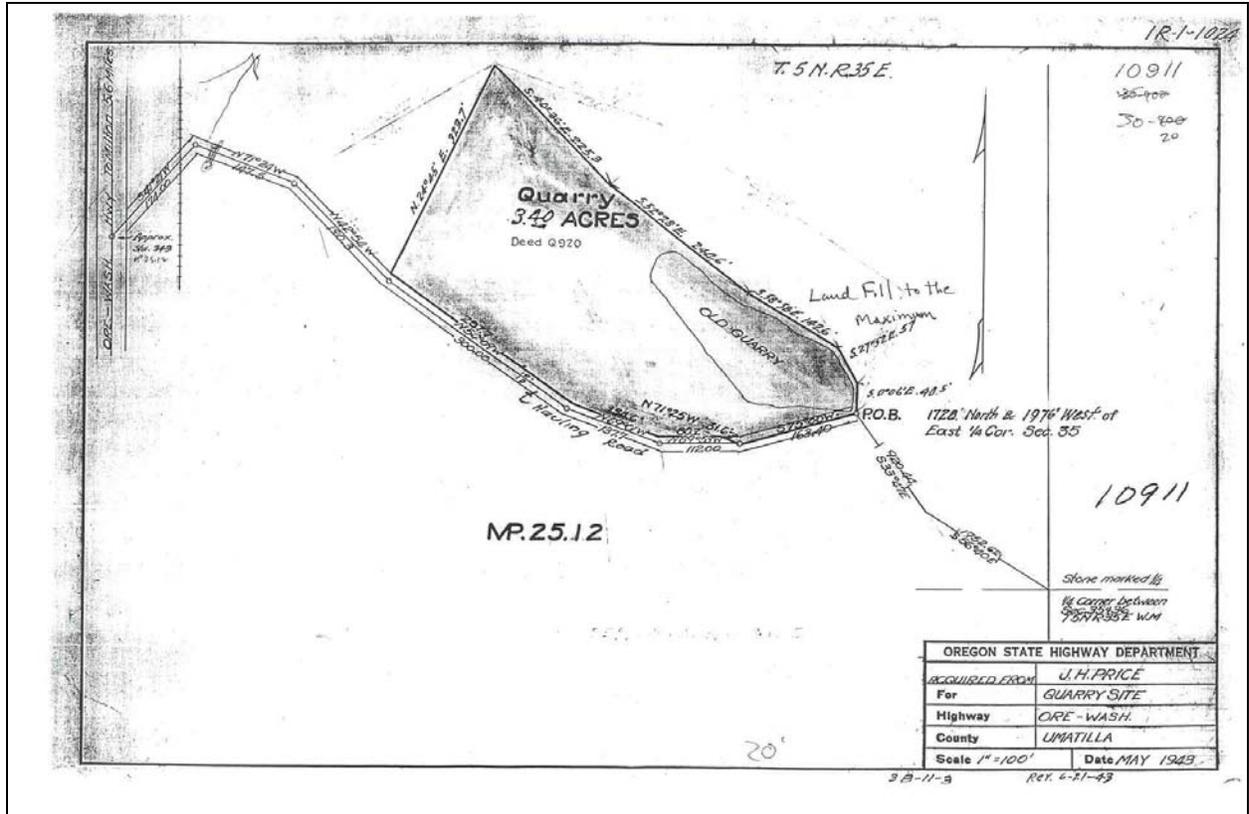


Aerial view of the quarry site located adjacent to Highway 11.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla					12	0008	25.1	05N	35.0E	35
File ID		Source #	Date Visited	Map #		Type of Site				
10911		30-020-5	08/09/2000	1R-1-1024		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
45 52'18.33000"	118 23'59.60000"	487	3.4	<1						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
Basalt	Tcw	Medium Dark Grey (N4)		Slight to Fresh			Highly Fractured			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good			R3	155	60,000	125,550				
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	NA					
Adjacent Land Use										
Farming										
Remarks										
This site is located west of Highway 11 about 150 meters. The easement has been blocked and this site is being used for a land fill. There is no screening and little room to work at this location. The quarry is located in the middle of a wheat field. This property is very close to 30-019-5 and has the same type of rock.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.2		21.4	22.7	16.0	19.5	3.5	16.9	3.0		
Material Use										
(1977)										



View of the small quarry site that is located in the middle of a wheat field.



Aerial view of the small quarry site located east of Highway 11.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla					12	0028	10.2	01N	32.0E	23
File ID		Source #	Date Visited	Map #		Type of Site				
24243		30-023-5	08/08/2000	1R-5-834		Gravel				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
45 33'05.14750"	118 46'27.00038"	413.673	10.08	<3						
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color	Weathering		Jointing					
Volcanic Gravel	Qal	NA	NA		NA					
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair to Good			NA	120	65,000	105,300				
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	Adjacent to the east is McKay Creek.					
Adjacent Land Use										
Farming/ one residence to the northeast approximately 400 meters										
Remarks										
This site is adjacent to and north of Spring Creek Road. The material is composed of a mix of volcanic gravel of varying sizes and shapes. Major portion of the material has been removed. There is a small area near the creek still remaining. It appears that the material is composed of sand around 50%, and gravel around 50% by volume. The terrain is flat with good access.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
		15.8			13.1	.5				
Material Use										

W

E



View of the gravel site located north of Spring Creek Road.

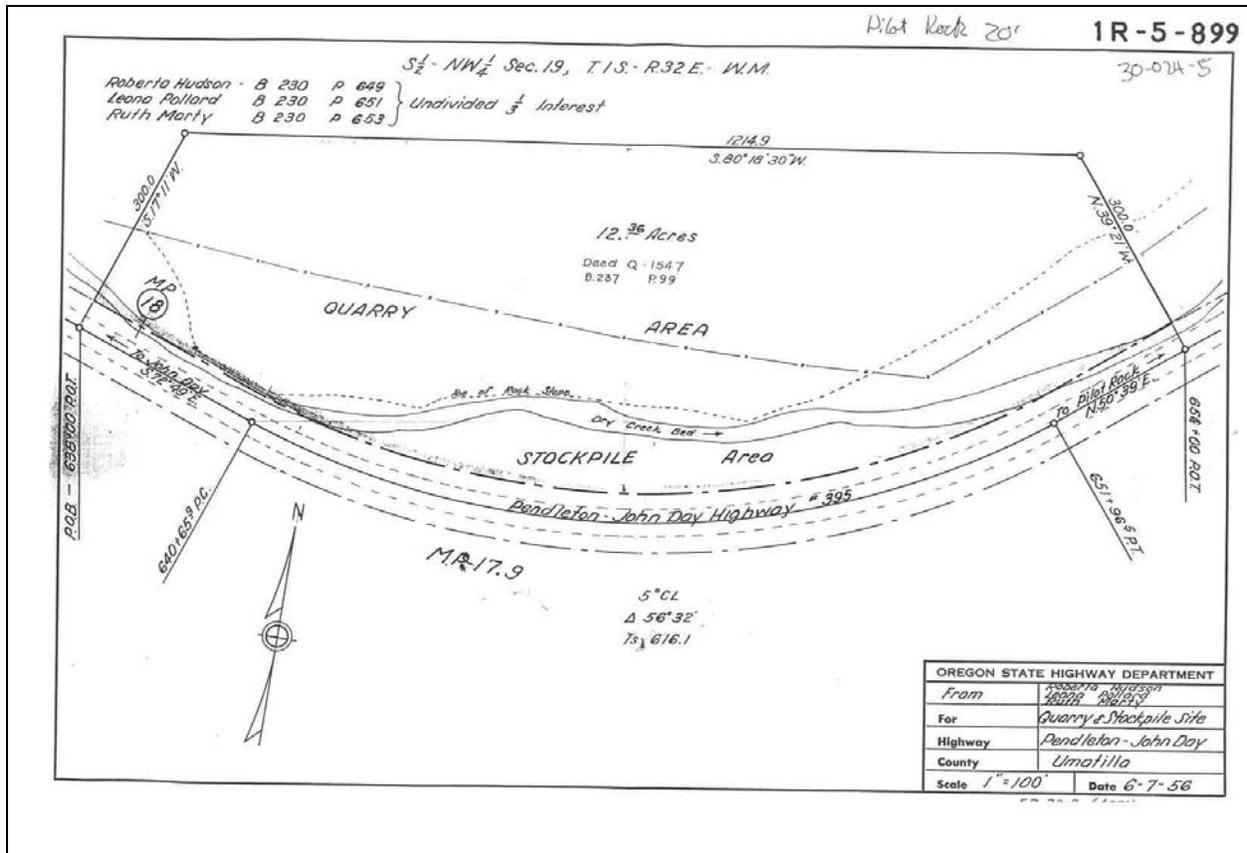


Close-up view of the material found at this site, composed of a mix of volcanic gravel of varying sizes.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla					12	0028	17.9	01S	32.0E	19
File ID		Source #	Date Visited	Map #			Type of Site			
25121		30-024-5	08/08/2000	1R-5-899			Quarry			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
45 27'57.74000"	118 52'07.66000"	548	12.36	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
Basalt	Tcg	NA		Slight			Highly Fractured			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good to Fair			R3-	155	160,000	334,800				
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	NA					
Adjacent Land Use										
Open Space										
Remarks										
This is an old quarry site along Highway 395 south of Pilot Rock. There is no developed access to the site. The ground is on the north side of the road radius. There is no screening and limited room to work. The terrain is a gradual slope of about 10 degrees. This property would have limited site line along this curvy section of the highway.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



View of the old quarry site looking across Highway 395.



Aerial view of the old quarry site along Highway 395.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla	Nye Junction Quarry				12	0028	23.8	01S	31.0E	19
File ID		Source #	Date Visited	Map #		Type of Site				
00061, 35378		30-026-5	08/08/2000	1R-5-1674		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
45 27'36.47191"	118 59'01.78173"	711.367	26	<2	30-0090					
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color		Weathering		Jointing				
Basalt	Tcg	Medium Dark Grey (N4)		Slight		Highly Fractured				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair			R3	173	400,000	934,200				
Potentially Significant Site	Why			Open/Closed	Direction					
Yes	Maintenance yard/Large amount of ground			Closed	NA					
Adjacent Land Use										
Open space										
Remarks										
This site is located at the junction of Highway 74 and Highway 395. There is a sanding shed here at this location. The ground is used for a waste site/quarry. Some small disturbances at this site. The rock is slightly weathered and is very vesicular basalt. You can rip the material. There is plenty of room to work, with no screening. The terrain is gradual with little overburden.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.65	2.66	16.1	1.3	1.1	.4			7.8		
Material Use										
AC (1989)										

SW

E



View looking north at the 26 acre quarry site located at the junction of Highways 74 and 395.



Close-up view of the slightly weathered and very vesicular basalt found at this site.

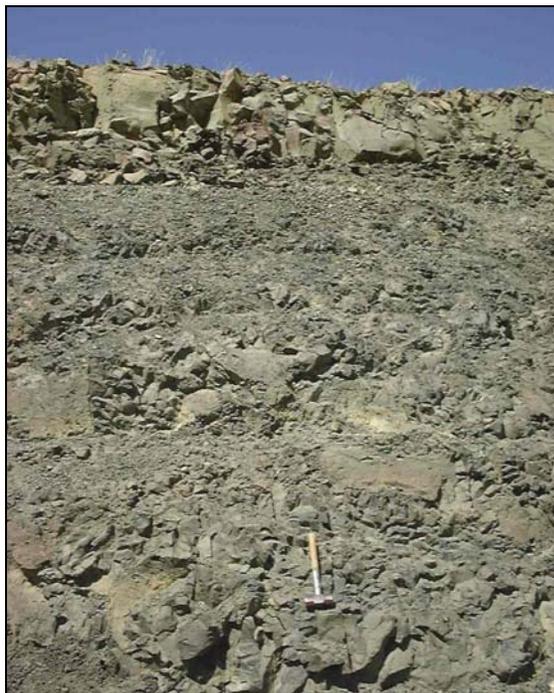
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla					12	0028	34.6	03S	30.5E	12
File ID		Source #	Date Visited	Map #		Type of Site				
Q0172, 10767		30-027-5	08/08/2000	1R-1-624		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
45 18'51.18689"	119 00'10.78107"	1082.129	11.27	<12	30-0097					
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color		Weathering		Jointing				
Basalt	Tcg	Medium Dark Grey (N4)		Fresh to Slight		Highly Fractured				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good			R3	175	300,000	708,750				
Potentially Significant Site	Why			Open/Closed	Direction					
Yes	Large ground near the summit of Highway 395			Closed	NA					
Adjacent Land Use										
Open space/Farming										
Remarks										
This site is adjacent to and west of Highway 395. This is a fine-grain, slightly vesicular, highly fractured basalt. There is no screening from the highway but ample room to work. The ground is flat and just about road level. You can rip the material. The pit is to the boundaries and the pit floor would need to be lowered if we want to pull any more material out. Multiple stock piles of crushed rocks (approximately 2000 cubic yards).										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.673	2.726	16.0	4.0	1.0	11.3	0.4	9.7	0.4		
Material Use										
Quarry Rock (1996)										

SE

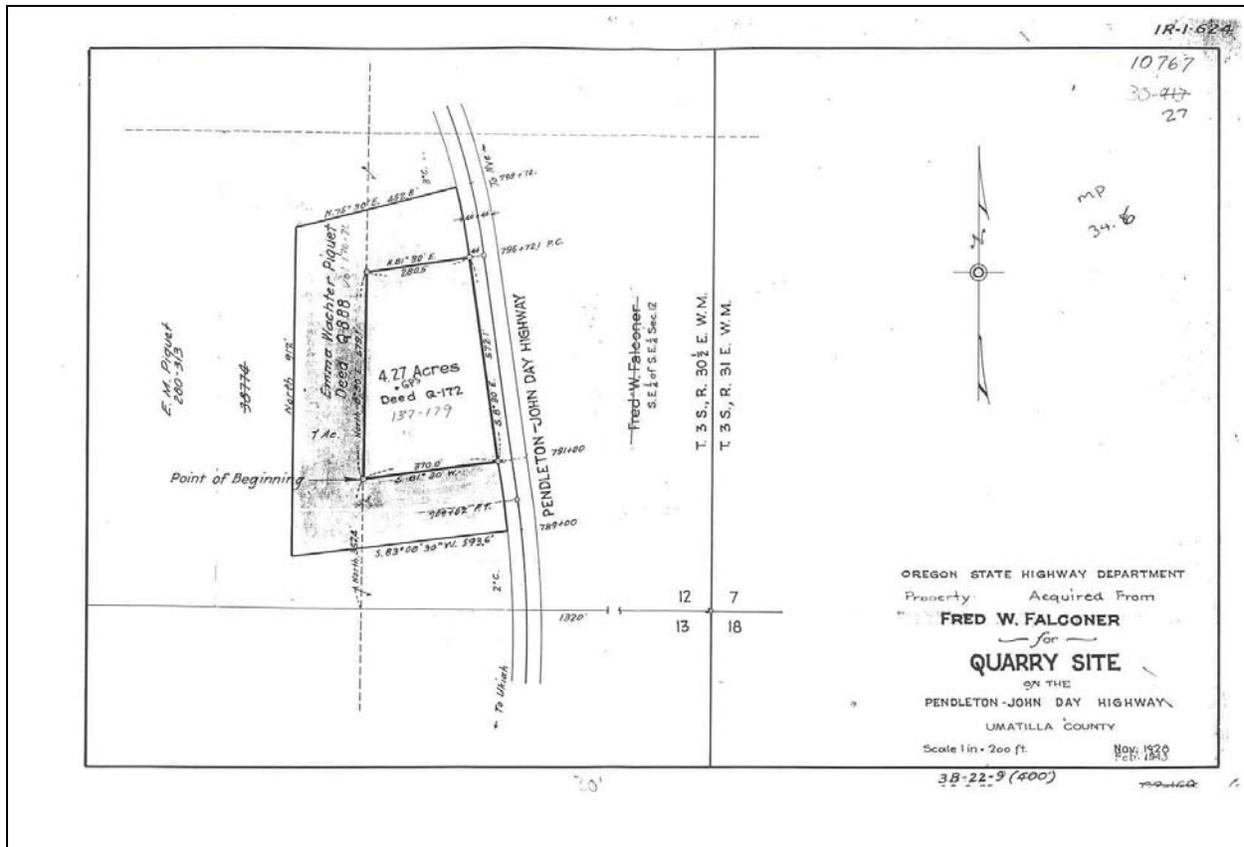
N



View of the quarry site located adjacent to and west of Highway 395.



Close-up view of the fine-grain, slightly vesicular, highly fractured basalt found at the site.



Aerial view of the quarry site that is located adjacent to and west of Highway 395.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla				12	0028	39.1	03S	31.0E	29
File ID		Source #	Date Visited	Map #			Type of Site		
Q0172		30-028-5	08/08/2000	1R-1-624			Road Cut		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
45 16'46.16040"	118 58'15.94613"	1268.948	4.27	NA					
Comments									
GPS acquired at turn-out.									
Rock Type	Unit	Color		Weathering			Jointing		
Basalt	Tcg	Olive Grey (5Y 4/1)		Slight to Moderate			Highly Fractured		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Fair to Poor			R3-	165	60,000	133,650			
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			NA	NA				
Adjacent Land Use									
Open Space/State Park adjacent to the north									
Remarks									
This is a small road cut along Highway 395. The rest of the ground is raw land. The site is long and narrow. The rock exposed is of little value for AC. Maintenance might use the material for shoulder or fill. The property is very close to Battle Mountain State Park.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

N

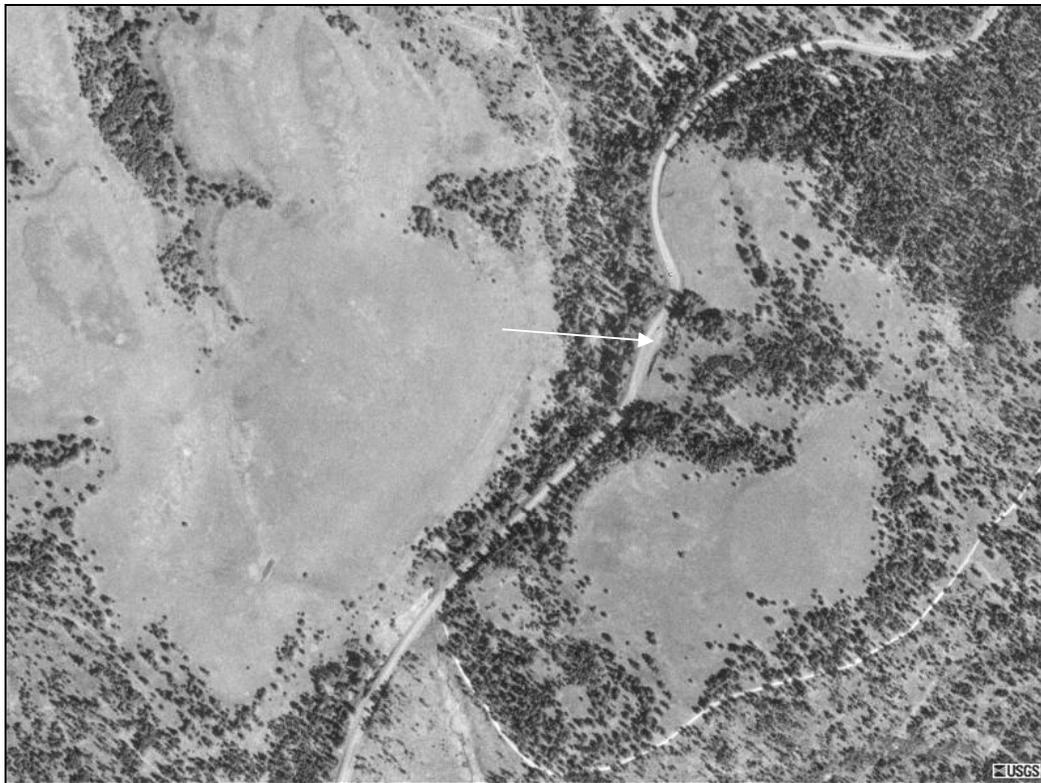
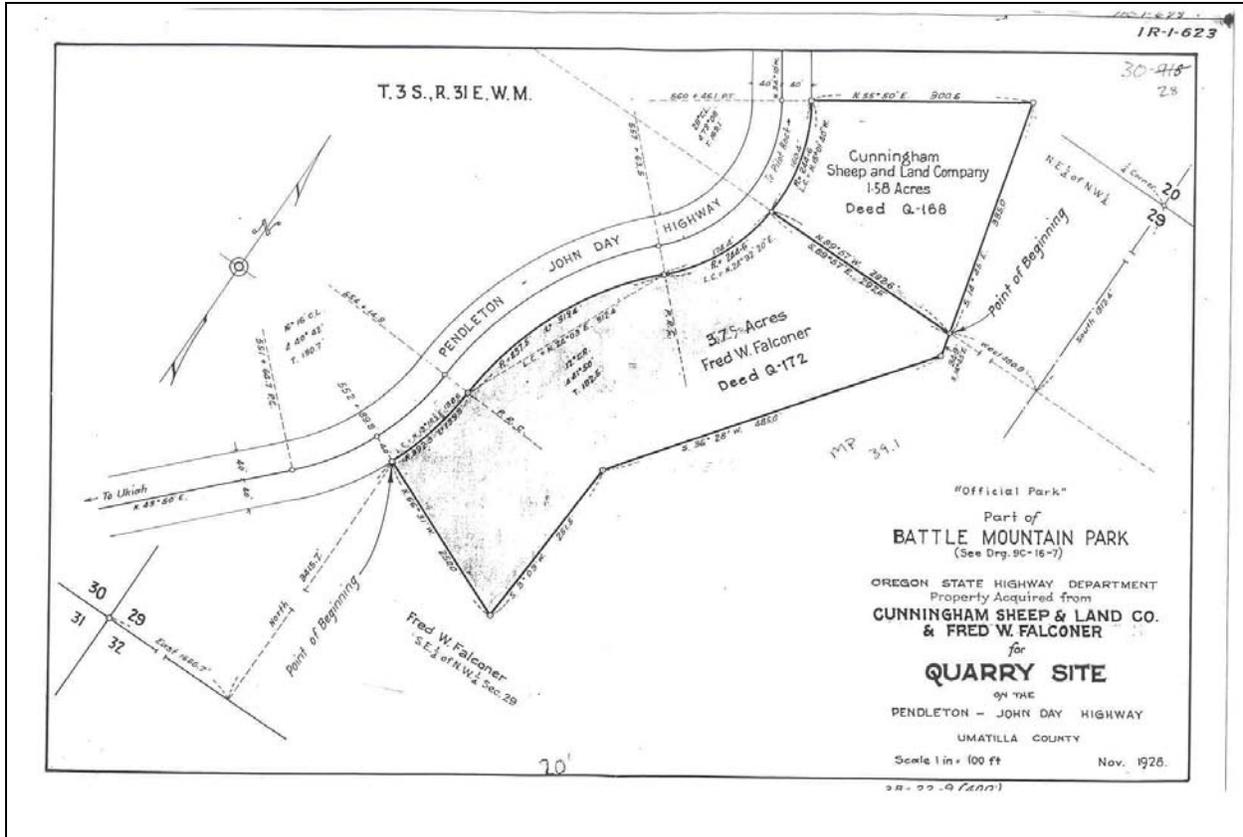
SW



View of the small road cut site along Highway 395 near Battle Mountain State Park.



Close-up view of the material at the road cut.



Aerial view of the small road cut located southeast of Highway 395 and southwest of Battle Mountain State Park.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla					12	0028	51	05S	31.0E	21
File ID		Source #	Date Visited	Map #			Type of Site			
10609		30-029-5	08/08/2000	1R-2-1319			Raw Land			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #				
45 07'26.53000"	118 58'30.68000"	1036	50	NA		20-0020				
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
Igneous Gravel	Qal	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Unknown			NA	120						
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			NA	Camas Creek bisects the ground					
Adjacent Land Use										
Open space/State Park										
Remarks										
This site is located on the east side of Highway 395. There is no access to the property. This is raw land on either side of Camas Creek with the east side controlling at least 99%. This ground is difficult to get to with the location of the creek and the highway. There is a State Park adjacent to the site. There have been land use issues associated with this site.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
		15.73								
Material Use										
(1973)										



View looking east across Highway 395 at the large raw land site.

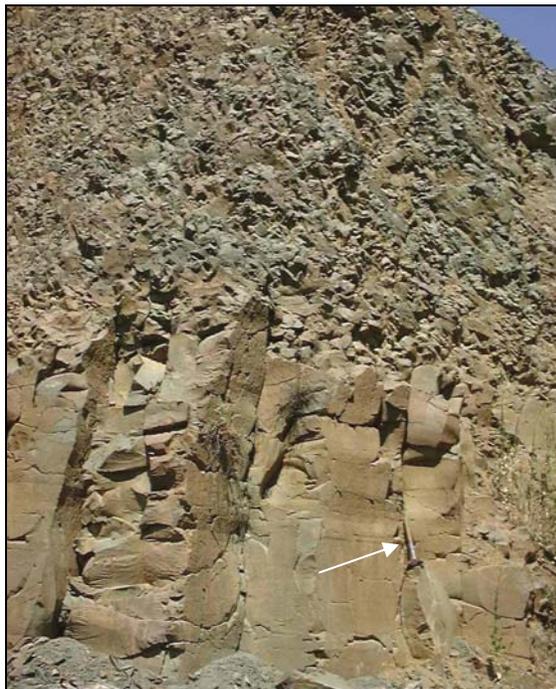
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla					12	0028	52	05S	31.0E	28
File ID		Source #	Date Visited		Map #			Type of Site		
10491		30-030-5	08/08/2000		10B-4-26			Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
45 06'42.71000"	118 50'22.06000"	1033	13.69	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
Basalt	Tcg	Medium Dark Grey (N4)		Fresh to Slight			Highly Fractured			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good			R3+	172	1,000,000	1,500,000				
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			NA	Camas Creek is adjacent to the south					
Adjacent Land Use										
Open space										
Remarks										
This site is adjacent to the north and south of Highway 395. The rock is a fine-grain, highly fractured, slightly vesicular basalt. There is no screening, but limited room to work. Most of the removal of aggregate has been from the bottom of the hill. I strongly suggest that we work from the top down. The terrain is quite steep. The site is on a blind radius.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.67	2.76	13.0	3.2	3.2			13.0	0.3		
Material Use										
AC (1987)										

SW

NE



View looking north at the quarry site that is located north and south of Highway 395 on a corner.



Close-up view of the quarry face and the fine-grain, highly fractured, and slightly vesicular basalt that composes it.

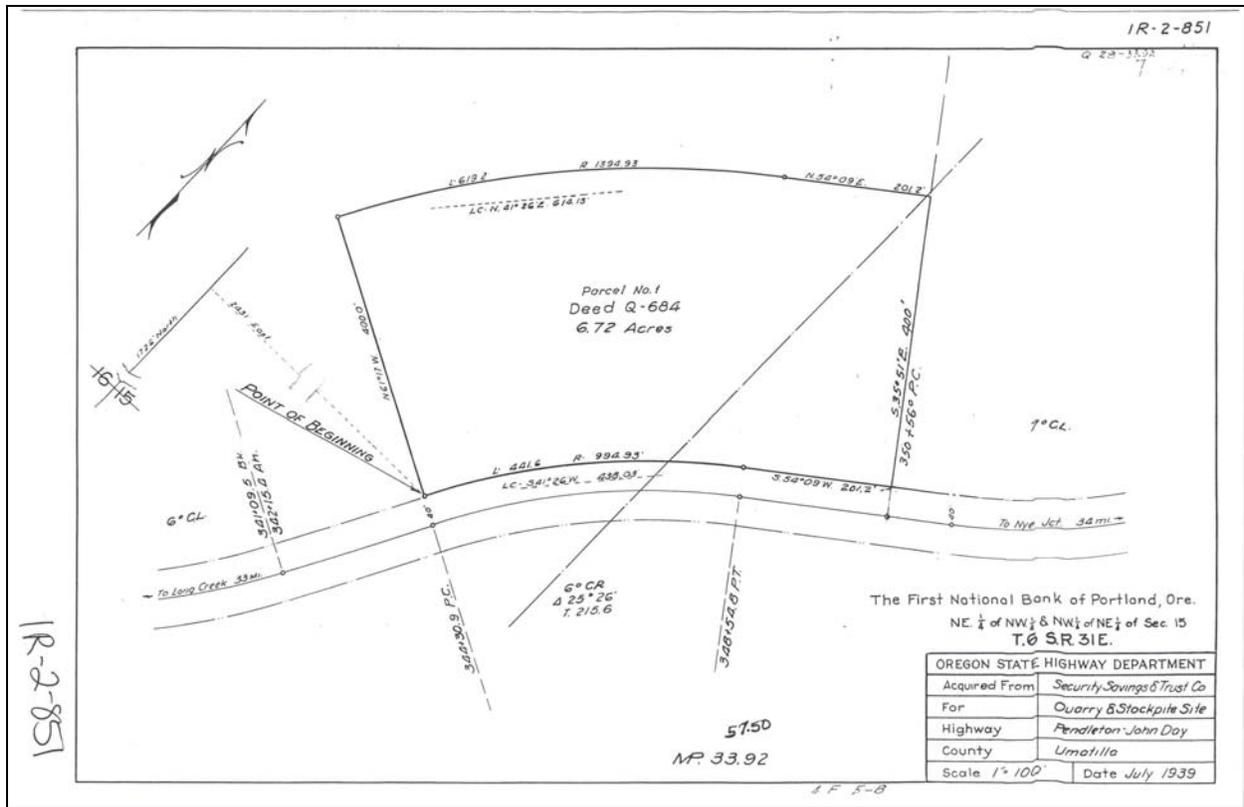
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla					12	0028	57.5	06S	31.0E	15
File ID		Source #	Date Visited	Map #		Type of Site				
07241		30-031-5	08/08/2000	1R-2-851		Raw Land				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
45 03'10.67000"	118 58'18.11000"	915	6.72	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering		Jointing				
Basalt	Tcg	NA		NA		NA				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Unknown			NA	120	120,000	194,400				
Potentially Significant Site	Why	Open/Closed		Direction						
No	NA	Closed		To the south across Highway 395 about 50 meters is Camas Creek.						
Adjacent Land Use										
Open Space										
Remarks										
This is raw land adjacent to the north along Highway 395. There is no visible disturbance at this location. The terrain is very steep in this area, about 30 to 40 degrees. There is no screening and no room to work. This is the southern most site in Umatilla County. There is some timber value.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

SW

NW



View of the raw land site located adjacent to the north of Highway 395.



Aerial view of the raw land site located north of Highway 395.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla				12	0036	1	05N	29.0E	13
File ID		Source #	Date Visited	Map #			Type of Site		
RW1114		30-032-5	08/09/2000	1R-5-533			Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
45 54'55.62451"	119 07'56.73148"	124.922	133.27	<1					
Comments									
GPS acquired in the pit.									
Rock Type	Unit	Color		Weathering			Jointing		
Basalt	Tcw	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)		Reserve (Tons)		
Good to Fair			NA	155	320,000		669,600		
Potentially Significant Site	Why			Open/Closed		Direction			
Yes	Large acreage			Closed		North about 600 meters is the Columbia River			
Adjacent Land Use									
Open space									
Remarks									
This site is located at the junction of the Cold Springs Highway and Highway 730. We own 109.53 acres of land along Highway 730. I evaluated the quarry site (23.74 acres) at the junction. This site has a thin intermittent basalt flow exposed with terrace gravel all around. The gravel is a heterogeneous mix of lithology and size. The gravel is about 50% and sand 50% by volume. The gravel is most likely thin and is not of much consequence. The basalt is a fine-grain, moderately fractured rock. You can rip the basalt and could get rip rap. There is no screening with room to work. The terrain is fairly flat. Part of the ground is BLM controlled.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

NW

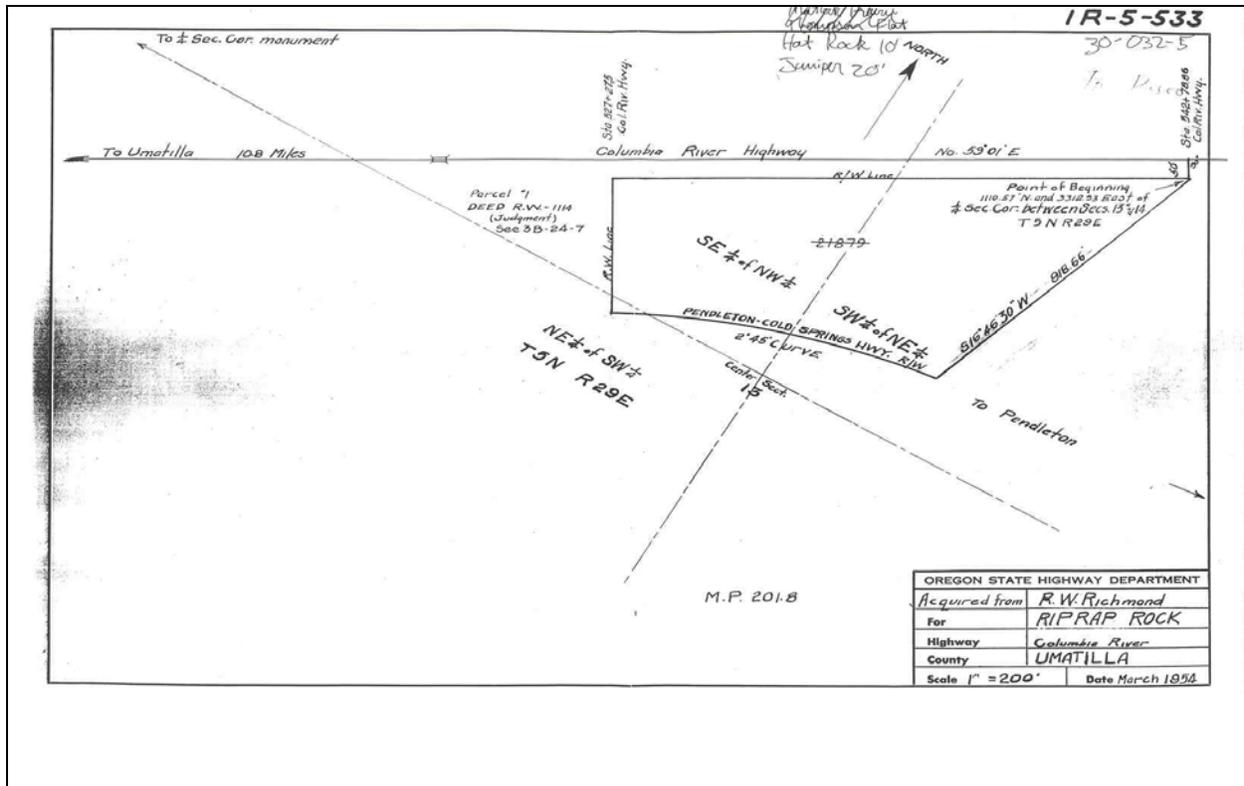
SE



View of the pit on the large quarry site located at the junction of Highway 37 and U.S. Highway 730.



Close-up view of the rock found in the pit at this site.

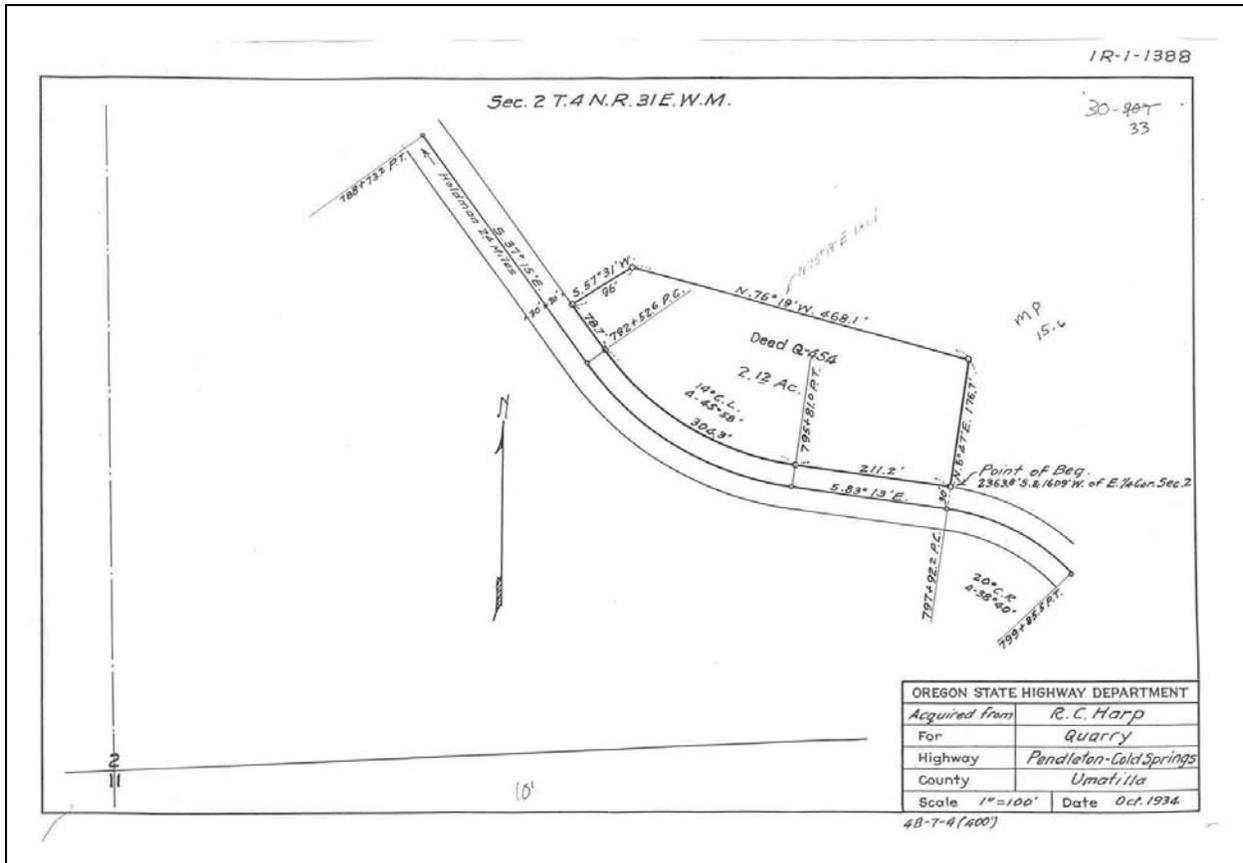


Aerial view of the large quarry site located at the junction of Highway 37 and U.S. Highway 730.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla					12	0036	15.6	04N	31.0E	02
File ID		Source #	Date Visited	Map #			Type of Site			
01761		30-033-5	08/10/2000	1R-1-1388			Raw Land			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
45 51'00.76000"	118 53'53.32000"	364	2.12	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
NA	Tcw	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
NA			NA	120						
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	Adjacent to the Middle Fork Cold Springs					
Adjacent Land Use										
Open space/Farming										
Remarks										
This site is adjacent to the north on Highway 37. The ground is just a wide spot for a stockpile or staging area. There is no aggregate value here.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.57	2.65	20.4	5.6	6.8			21.1	1.7		
Material Use										
AC Base (1991)										



Aerial view of the small raw land site that is adjacent to and north of Highway 37.



County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla					12	0052	74.6	01S	30.0E	31
File ID		Source #	Date Visited	Map #		Type of Site				
18790		30-035-5	08/08/2000	1R-1-498		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
45 26'16.11901"	119 08'10.16553"	737.349	19.25	<1						
Comments										
GPS acquired along Highway 74 and the access point.										
Rock Type	Unit	Color		Weathering			Jointing			
Basalt	Tcg	Medium Dark Grey (N4)		Fresh			Highly Fractured			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good			R3	162	200,000	437,400				
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	NA					
Adjacent Land Use										
Open space										
Remarks										
This is adjacent to and northwest of Highway 74 near the county line. There is a small disturbance at this location. The rock is a fine-grain highly fractured basalt. There is some room to work, but no screening. The terrain has a slope of approximately 20 to 25 degrees. Little to no overburden. We would need to develop the access to this site. You can rip the material.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

SW

NE



View of the quarry site located adjacent to and northwest of Highway 74.

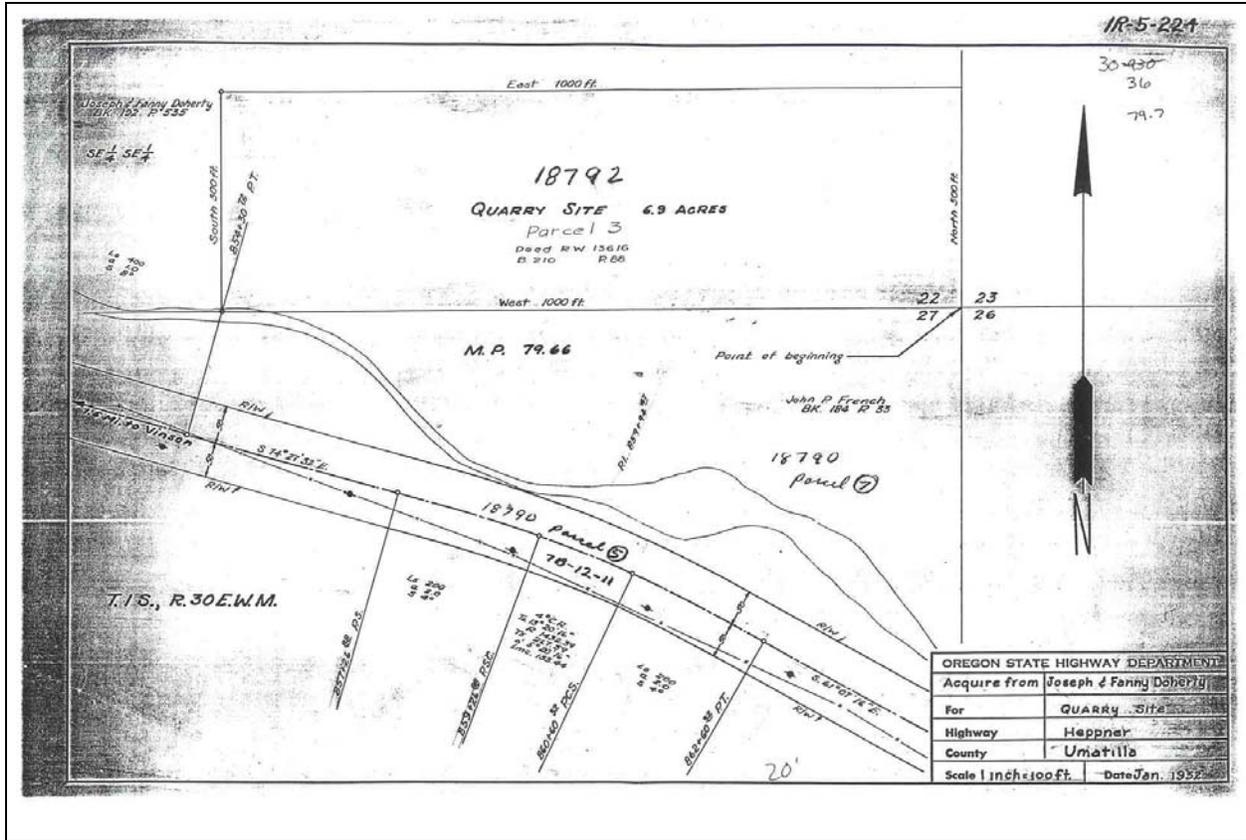
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla				12	0052	79.7	01S	30.0E	22
File ID		Source #	Date Visited	Map #			Type of Site		
18792		30-036-5	08/08/2000	1R-5-224			Raw Land		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
45 27'29.76000"	119 03'59.66000"	679	6.9	NA					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
Basalt	Tcg	Medium Dark Grey (N4)		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Good			NA	120	145,000	234,900			
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			Closed	NA				
Adjacent Land Use									
Open space									
Remarks									
This is raw land adjacent to and north of Highway 74. There is no access to this site. The rock here is a fine-grain basalt. The terrain is fairly steep at about 35 degrees. There would be no screening and limited room to work.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

NW

NE



View of the raw land site that is adjacent to and north of Highway 74.



Aerial view of the raw land site located north of Highway 74.

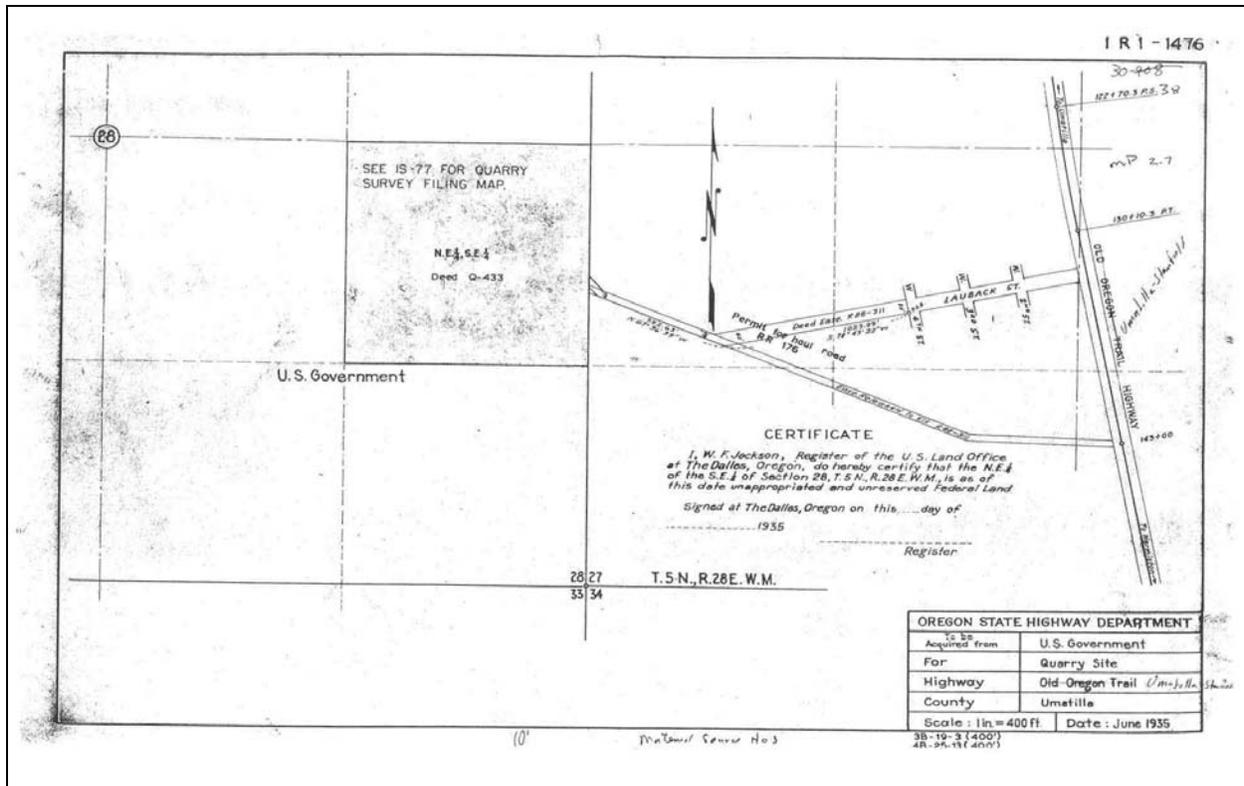
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla				12	0054	2.7	05N	28.0E	28
File ID		Source #	Date Visited	Map #			Type of Site		
Q0433		30-038-5	08/10/2000	1R-1-1476			Raw Land		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
45 53'06.12000"	119 18'27.75000"	151	40	NA					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
Basalt	Tcs	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Fair to Good			NA	120	600,000	972,000			
Potentially Significant Site	Why			Open/Closed	Direction				
No	USA Ground			Closed	NA				
Adjacent Land Use									
Industrial									
Remarks									
This site is located west of Highway 395 about 1000 meters in Umatilla, OR. This property is owned by the USA. I had no access to this site to evaluate the ground. The easement is not evident anymore. This property is part of Umatilla Butte.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
2.85	2.87	14.3	1.4	2.3			0.3	20.1	
Material Use									
AC Base (1989)									

SW

N



View of the 40 acre site that is part of the Umatilla Butte and is located west of Highway 395.

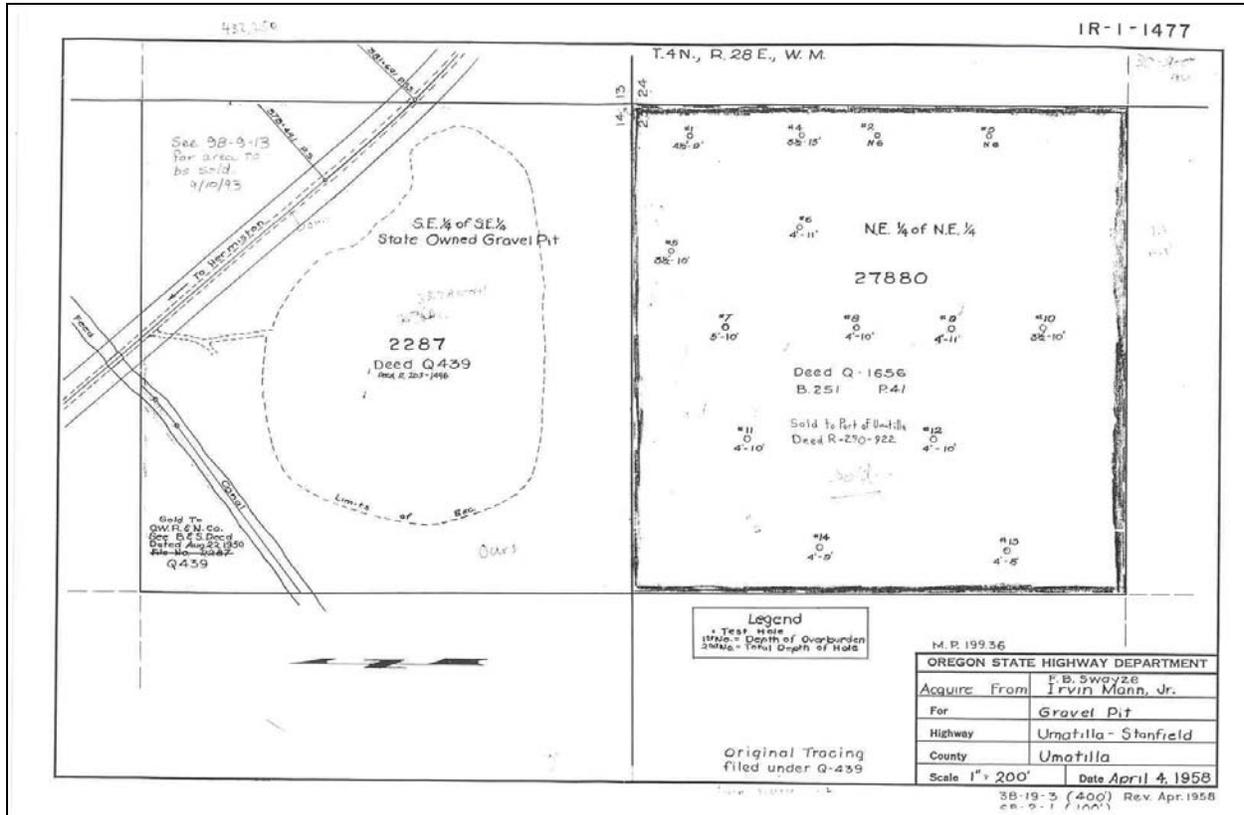


Aerial view of the raw land site located west of Highway 395 about 1000 meters.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla	Hermiston Maintenance Shop				12	0054	7.1	04N	28.0E	14
File ID		Source #	Date Visited	Map #		Type of Site				
02287, 27880		30-040-5	08/10/2000	1R-1-1477		Maintenance Yard				
Latitude		Longitude		Elev. (m)	Acreage	Pit Size		DOGAMI Permit #		
45 49'19.14000"		119 16'11.80000"		183	33.7	NA				
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type		Unit	Color		Weathering			Jointing		
NA		Qgs	NA		NA			NA		
Quality				Hardness	lbs./cu ft.		Reserve (cy)		Reserve (Tons)	
NA				NA	0					
Potentially Significant Site		Why			Open/Closed		Direction			
No		NA			NA		NA			
Adjacent Land Use										
Industrial										
Remarks										
This is the Maintenance Yard on Highway 207 in Hermiston. The excess ground is being used for a waste site and bone yard.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.65	2.74	17.1	4.3	2.9			21.4	.6		
Material Use										
AC (1988)										



Aerial view of the Hermiston Maintenance Yard located along Highway 207.



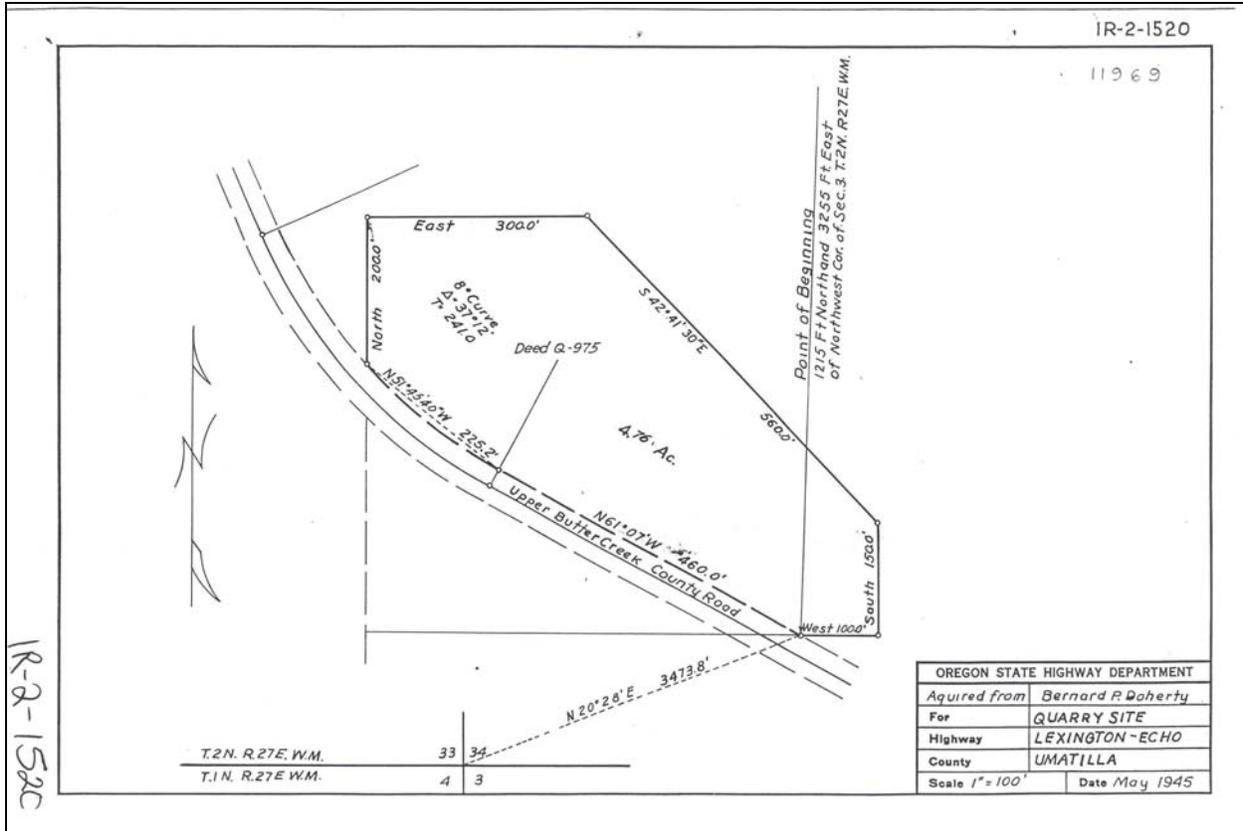
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla				12	0320	19.9	02N	27.0E	34
File ID		Source #	Date Visited	Map #			Type of Site		
11969		30-041-5	08/10/2000	1R-2-1520			Raw Land		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
45 36'43.27000"	119 25'46.82000"	353	4.76	NA					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
Basalt	Tcw	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Good			NA	150	97,000	196,425			
Potentially Significant Site	Why			Open/Closed	Direction				
NA	NA			NA	NA				
Adjacent Land Use									
Farming/House to the south about 400 meters									
Remarks									
This site is adjacent to and north of Butter Creek Road, near the Morrow/Umatilla County line. This site is raw land with no visible disturbance. The rock is a fine-grain basalt. The terrain is steep at about 35 plus degrees. There is no room to work and no screening from the County Road.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

NW

NE



View of the raw land site looking across Butter Creek Road.



Aerial view of the raw land site along Butter Creek Road.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla	Weston Pit				12	0330	2.2	04N	35.0E	24
File ID		Source #	Date Visited	Map #		Type of Site				
29427		30-043-5	06/06/2001	10C-34-6		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
45 48'30.54245"	118 23'25.03590"	779.638	10.35	<4	30-0061					
Comments										
GPS acquired at the access gate.										
Rock Type	Unit	Color		Weathering		Jointing				
Basalt	Tcg	Medium Dark Grey (N4)		Moderate to Slight		Highly Fractured				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair to Good			R2+ to R3	180	1,000,000	1,500,000				
Potentially Significant Site	Why			Open/Closed	Direction					
Yes	Acreage on State Highway.			Closed	NA					
Adjacent Land Use										
Farming										
Remarks										
This site is located adjacent to and south of Highway 204. The rock here is a weathered, highly fractured, fine-grain basalt that has minor vesicular structure. There is room to work with good screening. You can rip the material. The terrain is gradual. This site is used as a stockpile site. There is a locked gate at this location, but no sign. 100,000 cubic yards have been removed to date.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.4	2.67	14.8	13.9	5.9			16.8	1.4		
Material Use										
Base AC (1983)										

NW

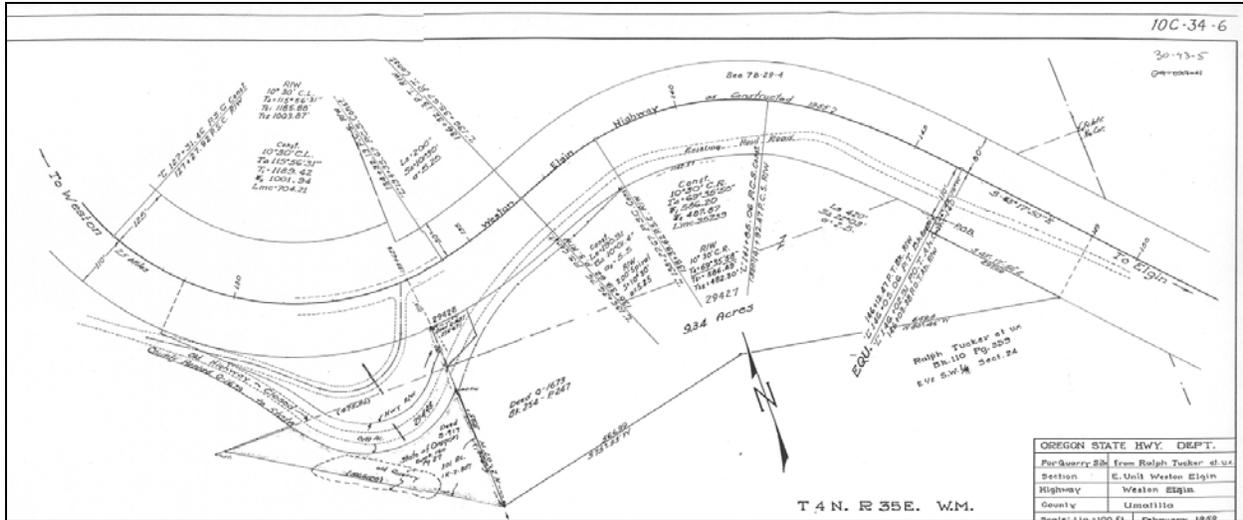
NE



View looking north across the quarry site located adjacent to and south of Highway 204.



Close-up view of the basalt found at this site.



Aerial view of the quarry site located adjacent to and south of Highway 204.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla					12	0330	11.3	04N	37.0E	30
File ID		Source #	Date Visited	Map #		Type of Site				
12272		30-044-5	08/09/2000	1R-2-1550		Maintenance Yard				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #				
45 47'24.72000"	118 14'48.47000"	1145	5.23	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
NA	Tcg	NA		NA			NA			
Quality			Hardness	lbs./cu ft.		Reserve (cy)	Reserve (Tons)			
NA			NA	0						
Potentially Significant Site	Why			Open/Closed		Direction				
NA	NA			NA		NA				
Adjacent Land Use										
Rural residential										
Remarks										
This site is adjacent to the south of Highway 204. There is a Maintenance sanding shed and storage building at this location. There is a small pond (30 meters by 70 meters) west and adjacent to the sanding shed that is stock by ODFW for public fishing.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



View of Weston Pond, which occupies the old pit at this site and is stocked with fish by ODFW.

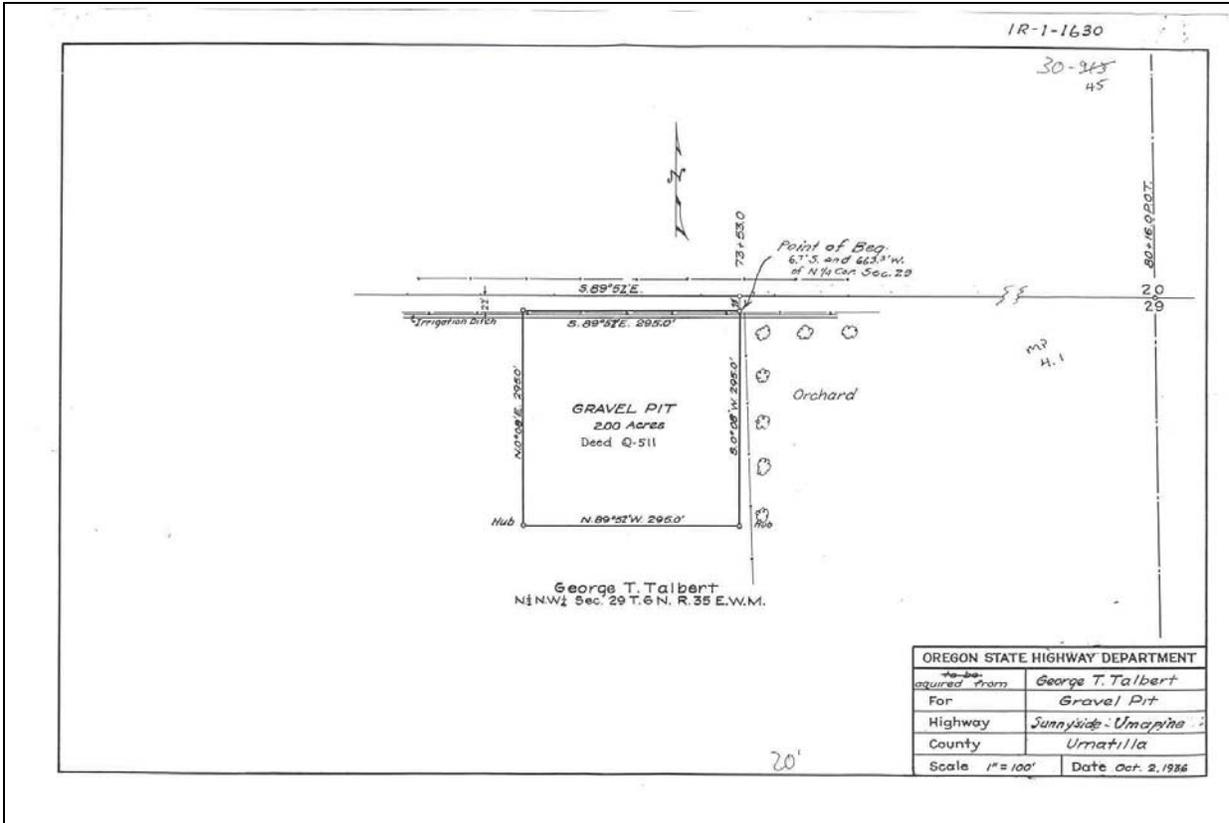


View looking south across Highway 204 at the sanding shed and maintenance storage building located at this site.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla					12	0332	4.1	06N	35.0E	29
File ID		Source #	Date Visited	Map #			Type of Site			
03874		30-045-5	08/15/2000	1R-1-1630			Raw Land			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
45 58'34.20000"	118 28'06.78000"	238	2	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
Gravel	Qs	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair to Good			NA	120						
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	NA					
Adjacent Land Use										
Rural residential										
Remarks										
This site is adjacent to and south of the Umapine Highway. The material here is composed of terrace gravel. There is no screening with limited room to work. The terrain is flat. There are residences and orchards adjacent. There is a locked cattle gate at the access point. Small site (2acres).										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



View of the small raw land site located south of the Umapine Highway.



View of the small raw land site located south of the Umatilla Highway.

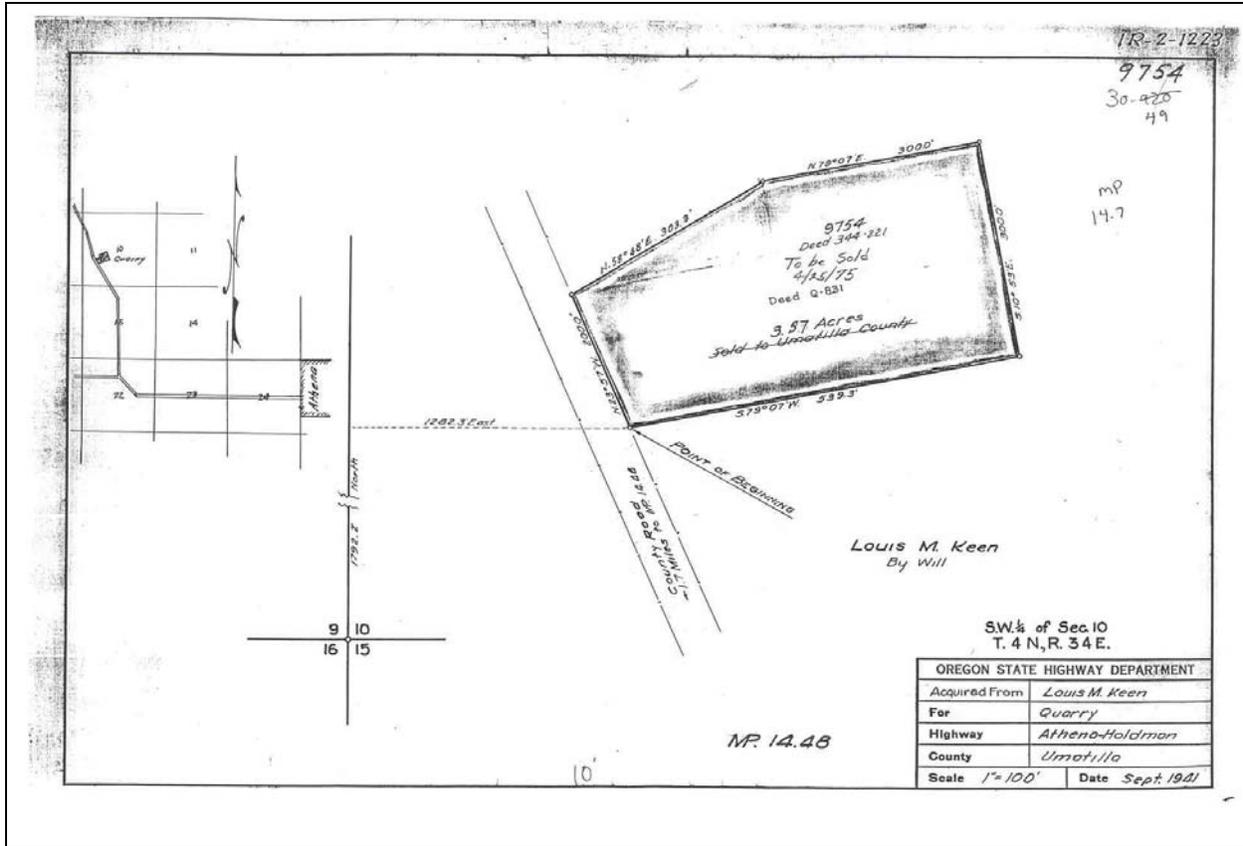
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla					12	0334	14.48	04N	34.0E	10
File ID		Source #	Date Visited	Map #			Type of Site			
09754		30-049-5	08/09/2000	1R-2-1223			Quarry			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
45 50'21.72000"	118 33'16.98000"	578	3.54	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
Basalt	Tcw	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
NA			NA	155						
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			NA	NA					
Adjacent Land Use										
Farming										
Remarks										
This site is located east of and adjacent to Gerking Flat Road. This site looks as if it has been reclaimed. There is no screening with limited room to work. The terrain has a very gradual slope up from the road. Part of the ground is within the Q1 geological unit with basalts below. The mile point from the 1R map is wrong.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
	2.751	11.1		2.0	6.0	1.0				
Material Use										
Coarse AC Aggregate (1998)										

NE

S



View looking east across Gerking Flat Road at the reclaimed quarry site.



Aerial view of the reclaimed quarry site located east of Gerking Flat Road.

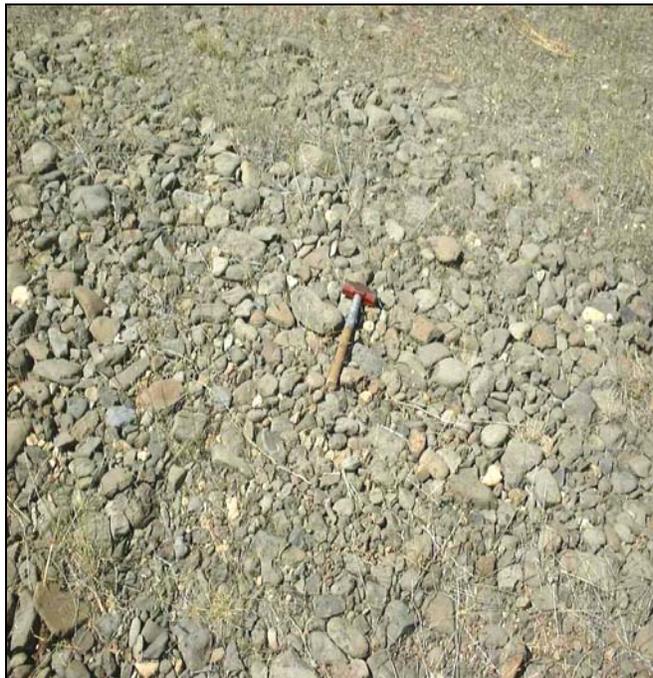
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla	Leverance Quarry				12	0341	1.6	05S	31.0E	14
File ID		Source #	Date Visited	Map #		Type of Site				
24463		30-051-5	08/08/2000	1R-5-842		Gravel				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
45 08'03.65293"	118 55'38.86710"	1024.992	7.55	NA						
Comments										
GPS acquired between the creek and Highway 244.										
Rock Type	Unit	Color	Weathering			Jointing				
Igneous Gravel	Qal	NA	NA			NA				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good			NA	120						
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	Camas Creek bisects the property					
Adjacent Land Use										
In the town of Ukiah										
Remarks										
This site is located on the east end of Ukiah and adjacent to the south of Highway 244. The property is on both sides of the creek. The gravel is composed of small boulder to cobble size material with very little sand. There is a small dike (levee) on our ground running the length of the creek. The ground is 4 to 6 feet below the highway and 2 to 3 feet above the creek.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

SW

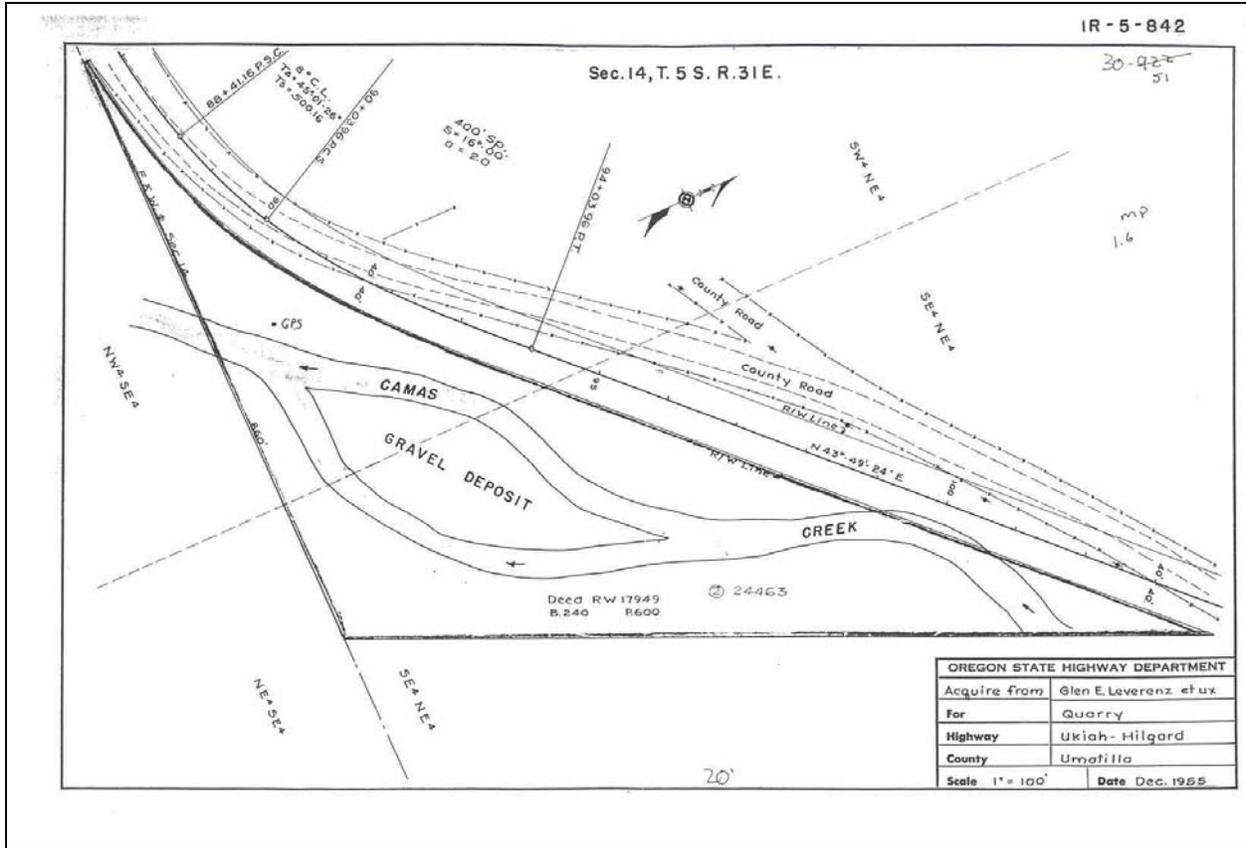
E



View of the gravel site located east of Ukiah, OR and south of Highway 244.



Close-up view of the gravel at this site composed of small boulder to cobble size material.



Aerial view of the gravel site located east of the town of Ukiah, OR.

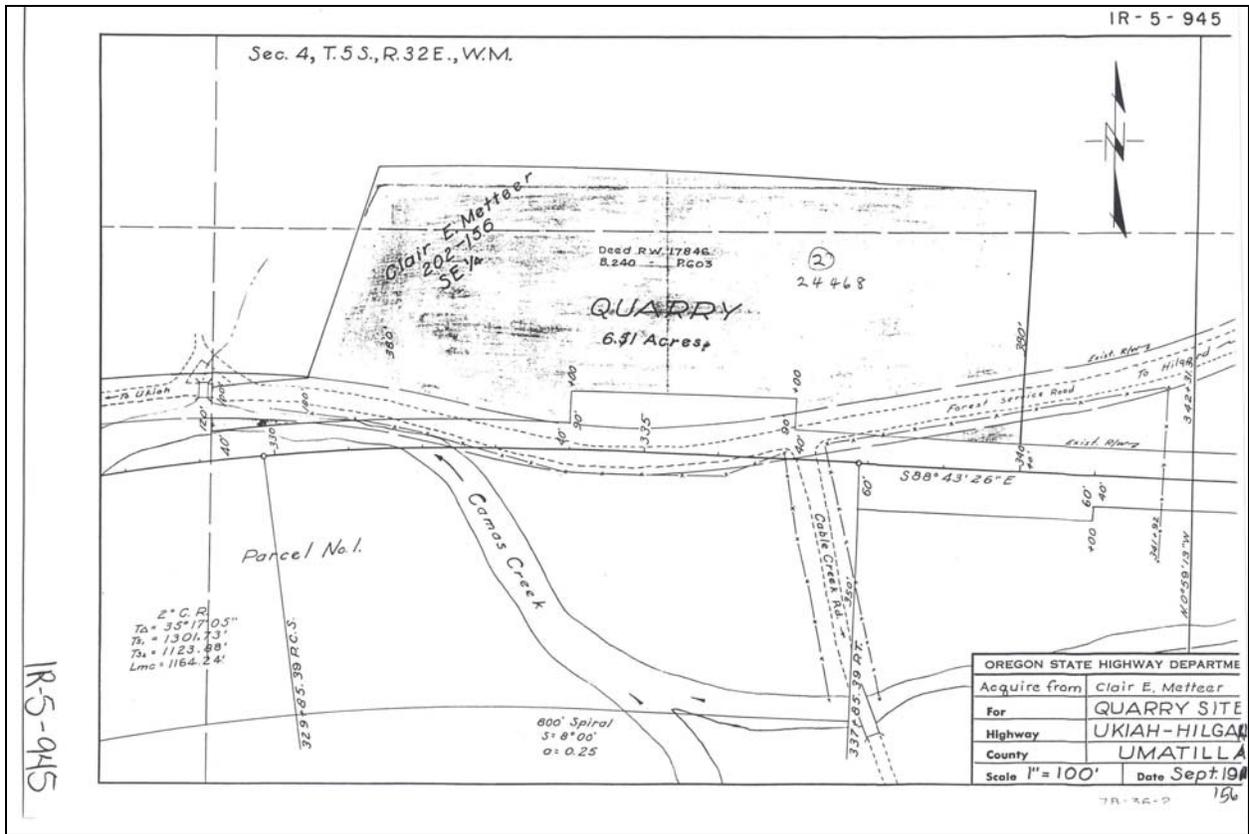
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla					12	0341	6	05S	32.0E	04
File ID		Source #	Date Visited	Map #		Type of Site				
24468		30-052-5	08/17/2001	1R-5-945		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
45 09'31.76000"	118 50'34.90000"	1097	6.51	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering		Jointing				
Basalt	Tcg	Medium Grey (N5)		Slight		Moderate Fracture to Massive				
Quality			Hardness	lbs./cu ft.	Reserve (cy)		Reserve (Tons)			
Good			R3+	184	200,000		300,000			
Potentially Significant Site	Why		Open/Closed		Direction					
No	Too Small		Closed		To the south approximately 100 meters is Camas Creek					
Adjacent Land Use										
Open Space										
Remarks										
This site is located north of and adjacent to Highway 244. The rock here is a fine-grain basalt. There is no room to work and no screening from the highway. The terrain is steep and all work should proceed from the top down. There is a stock pile site across the highway from this quarry.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.757	2.779	20.3	2.0		3.7	0.3	4.7	0.3		
Material Use										
Quarry Rock (1998)										



View of the quarry site located adjacent to and north of Highway 244.



Close-up view of the fine-grain basalt that comprises the quarry wall.



Aerial view of the quarry site located north of Highway 244.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla	Brogoitti Quarry				12	0006	207.7	02N	32.0E	08
File ID		Source #	Date Visited	Map #			Type of Site			
22924		30-076-5	08/10/2000	1R-5-644			Quarry			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #				
45 40'11.93433"	118 50'51.79457"	310.089	7.24	NA						
Comments										
GPS acquired at the locked gate.										
Rock Type	Unit	Color		Weathering			Jointing			
Basalt	Tcw	Olive Grey (5Y 4/1)		Slight			Moderately Fractured			
Quality			Hardness	lbs./cu ft.	Reserve (cy)		Reserve (Tons)			
Fair			R3-	155	20,000		41,850			
Potentially Significant Site	Why	Open/Closed		Direction						
No	NA	Closed		To the south about 800 meters is the Umatilla River						
Adjacent Land Use										
Industrial										
Remarks										
This property is a Maintenance bone-yard/waste/stock pile site. There is approximately 20,000 cubic yards of medium-grain moderately fractured basalt left. You can rip the material. There is no screening with room to work. There is minor rip rap at this site.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
	2.85			.8						
Material Use										
Rip Rap (1986)										



View of the Maintenance bone yard, waste rock and stock pile site.

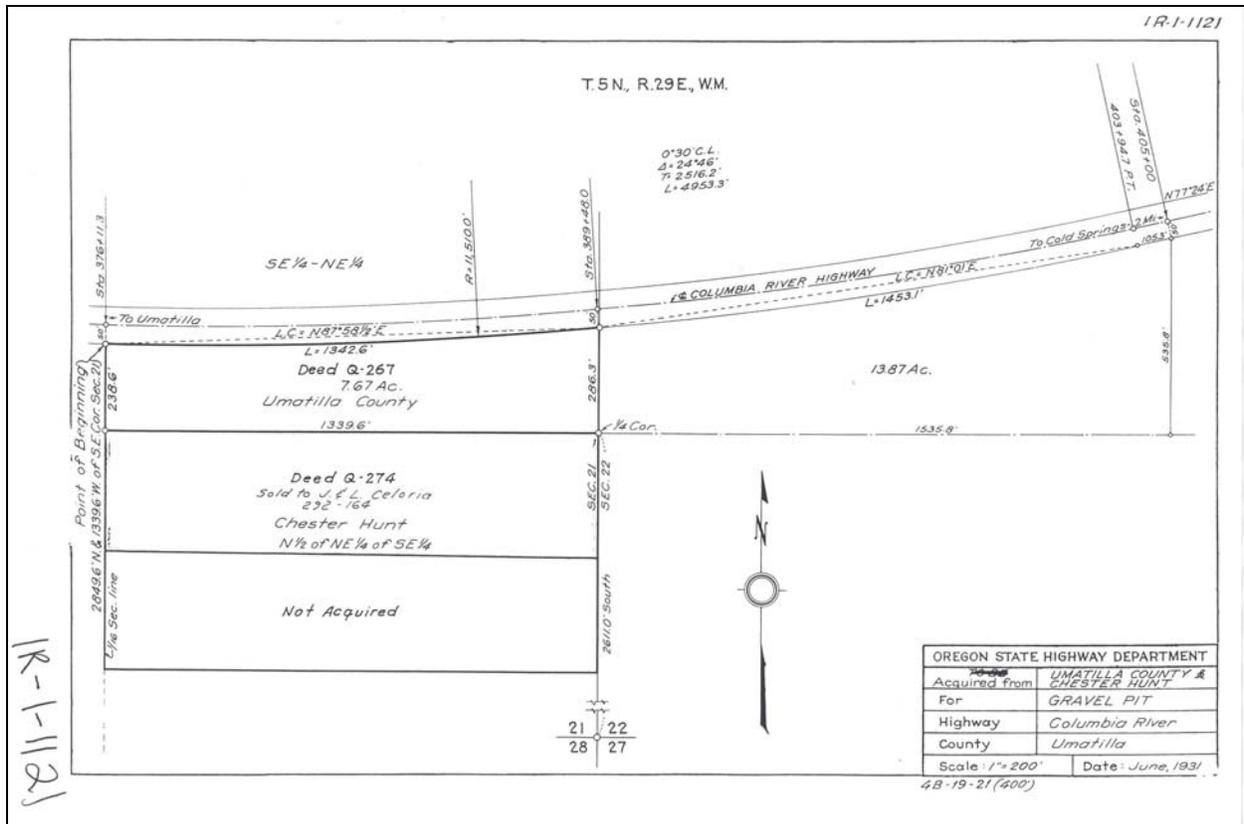


Close-up view of the rock found at this site.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla					12	0002	199	05N	29.0E	21
File ID		Source #	Date Visited	Map #			Type of Site			
Q0267		30-901-5	08/10/2000	1R-1-1121			Raw Land			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
45 54'03.70000"	119 11'05.54000"	129	7.67	NA	30-0033					
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color	Weathering			Jointing				
Basalt	Tcs	NA	NA			NA				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Unknown			NA	120	80,000	129,600				
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			NA	NA					
Adjacent Land Use										
Open space/Farming										
Remarks										
This site is located south of Highway 730. This is raw land with no visible disturbances. The material at this location is a basalt with minor amounts of gravel and sand (Qgs). The terrain is mostly flat but slopes away from the highway. There would be no screening from the highway and limited room to work.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



View of the raw land site located south of U.S. Highway 730.



Aerial view of the raw land site located south of U.S. Highway 730.

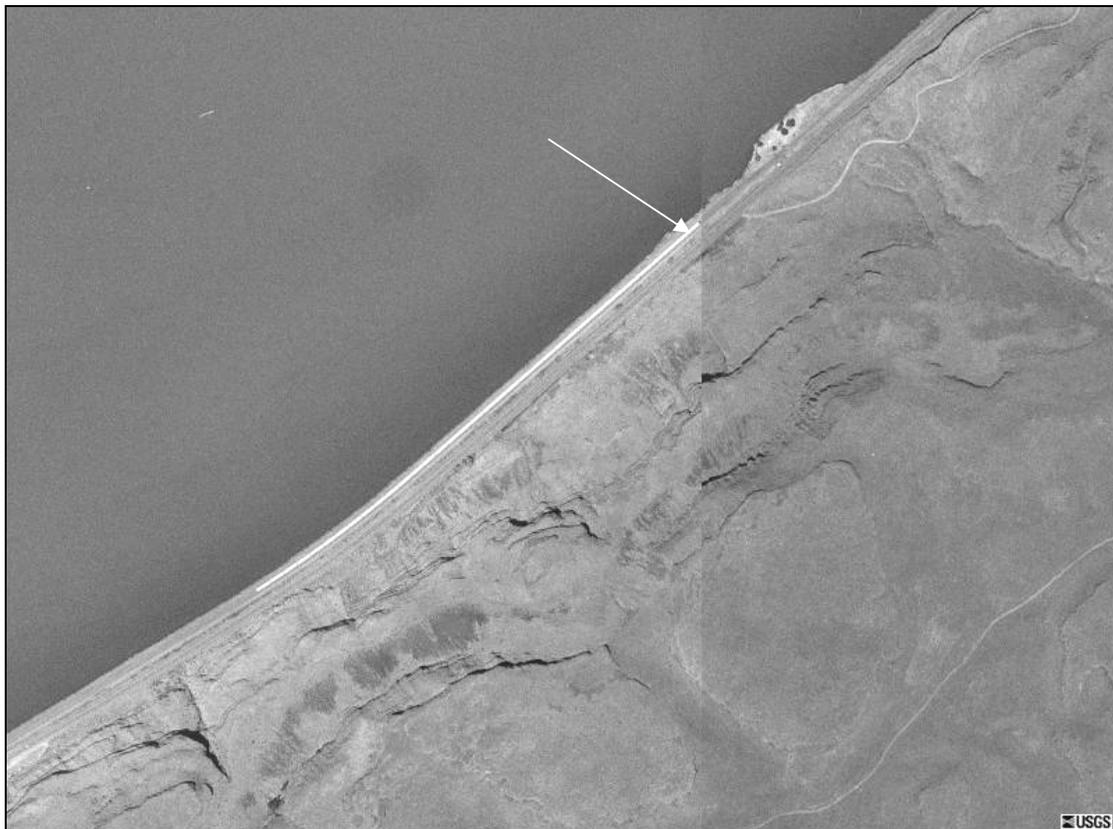
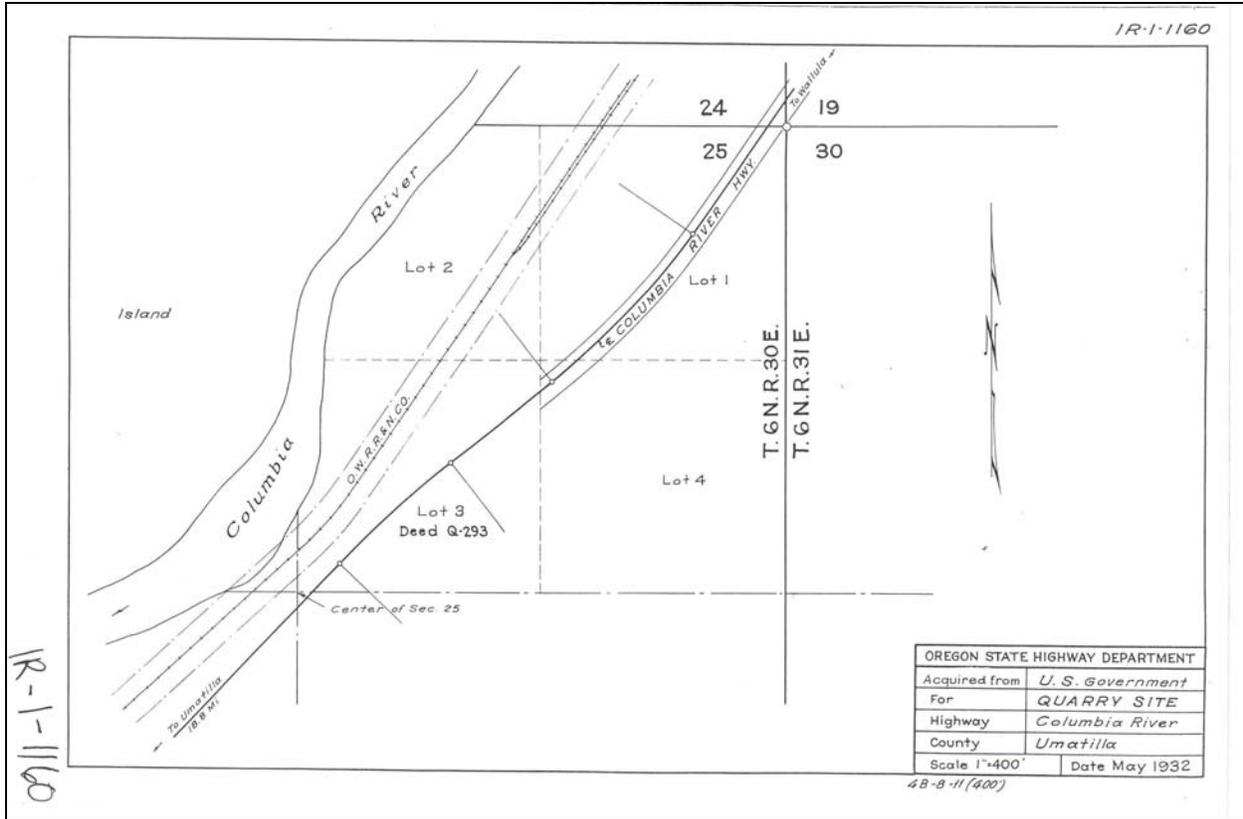
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla				12	0002	209	06N	30.0E	25
File ID		Source #	Date Visited	Map #			Type of Site		
Q0293		30-903-5	08/09/2000	1R-1-1160			Raw Land		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
45 58'12.90000"	119 00'26.49000"	119	40	NA					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
Basalt	Tcs	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Good to Fair			NA	120	100,000	150,000			
Potentially Significant Site	Why	Open/Closed	Direction						
No	USA ground	Closed	To the north about 100 meters across Highway 730 is the Columbia River						
Adjacent Land Use									
Open space									
Remarks									
This site is adjacent and south of Highway 730. This is raw land owned by the US government. The terrain has vertical cliffs composed of multiple lava flows. There would be no screening or room to work at this location.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

NE

SW

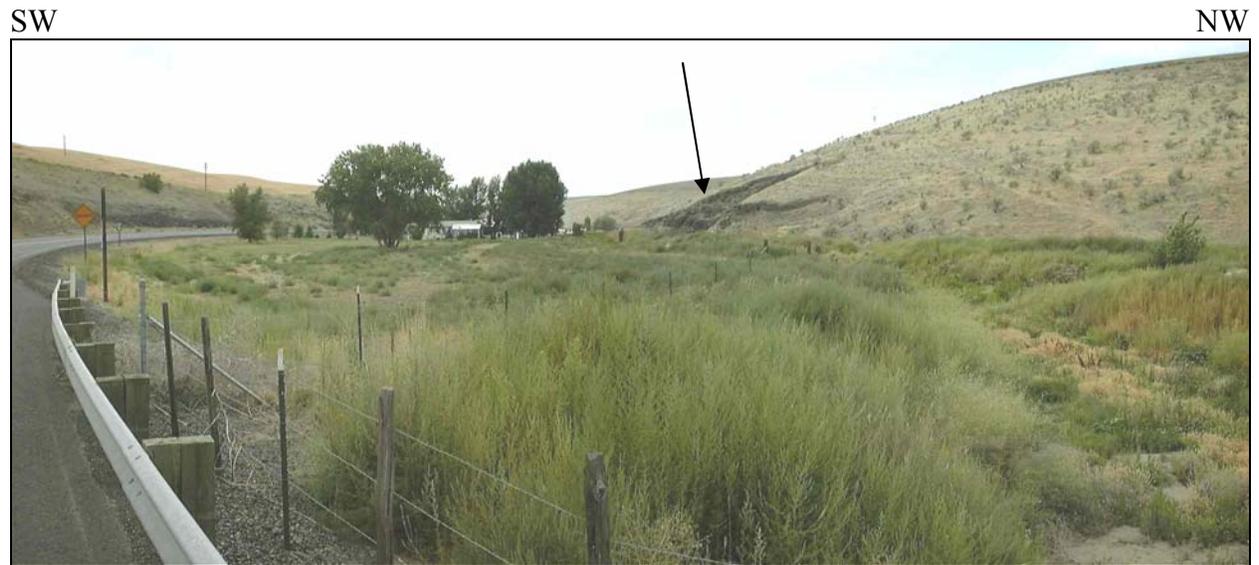


View of the raw land site located south of U.S. Highway 730.

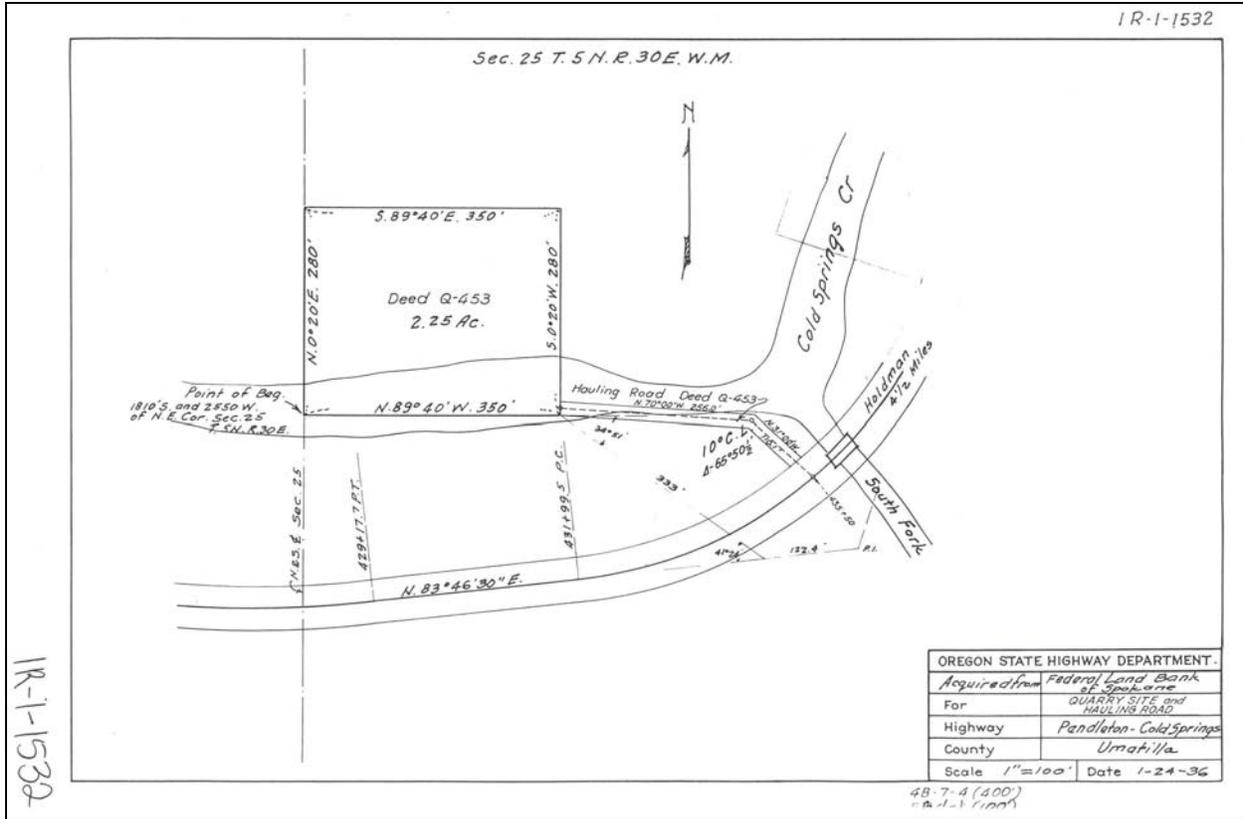


Aerial view of the raw land site located south of the Columbia River and U.S. Highway 730.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla				12	0036	3.78	05N	30.0E	25
File ID		Source #	Date Visited	Map #			Type of Site		
02956		30-904-5	08/09/2000	1R-1-1532			Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
45 53'17.62000"	119 00'18.01000"	0	2.4	<1					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
Basalt	Tcw	Medium Dark Grey (N4)		Slight			Highly Fractured		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Good to Fair			R3-	155	50,000	104,625			
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			NA	Adjacent to Cold Spring Creek				
Adjacent Land Use									
Farming/ Two residences within 100 meters.									
Remarks									
This site is north of Highway 37 about 200 meters. The access for this site is not there anymore. A private fence and our new guardrail meet at the access point. There is a private residence adjacent to the south across the creek and near the old pit. There is no screening and no room to work at this location. The terrain has about a 20 degree slope to it. This site should be evaluated for surplus.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									



View, from Highway 37, looking at the quarry site with no access.

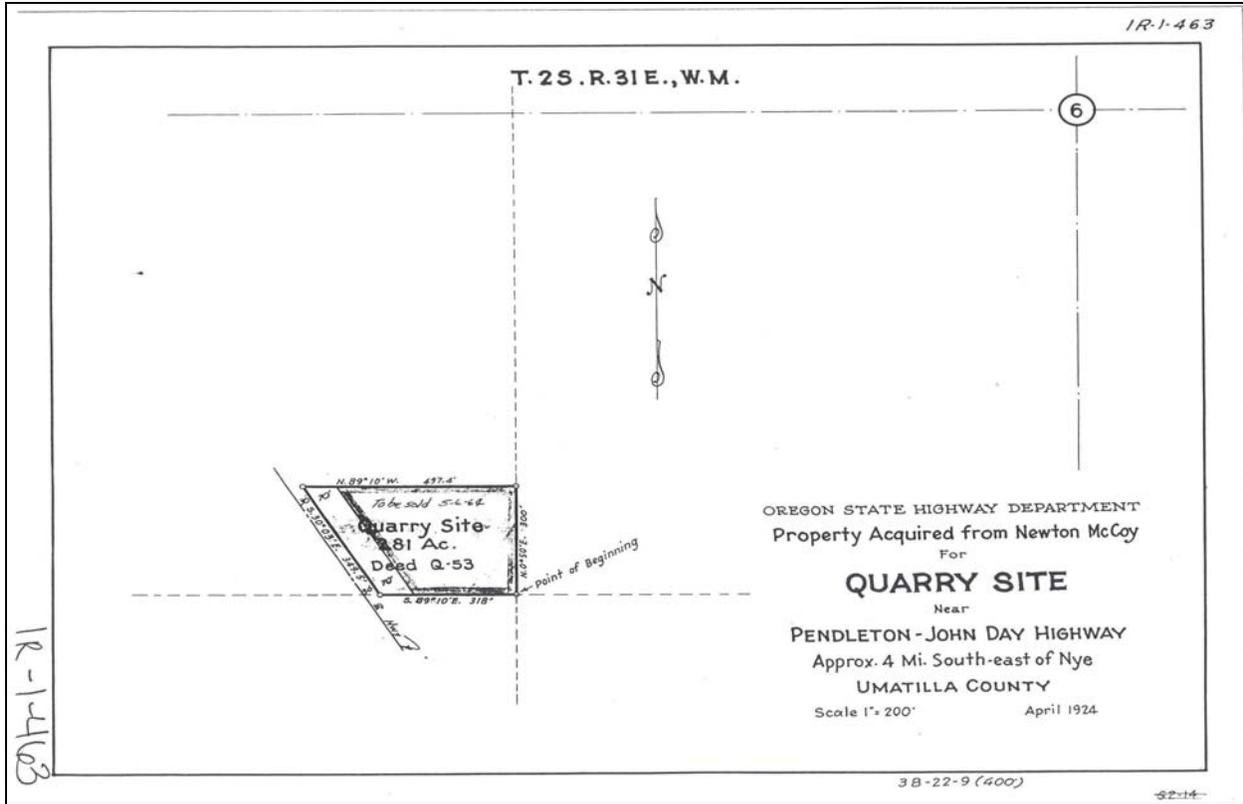


Aerial view of the quarry site located north of Highway 37 and adjacent to Cold Spring Creek.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla	McCoy Quarry				12	0028	0	02S	31.0E	06
File ID		Source #	Date Visited	Map #		Type of Site				
Q0053		30-906-5	08/08/2000	1R-1-463		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
45 25'06.51000"	118 59'35.07000"	852	2.81	<1						
Comments										
GPS of the general area acquired using Terrain Navigator Software.										
Rock Type	Unit	Color		Weathering			Jointing			
Basalt	Tcg	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
NA			NA	155	30,000	62,775				
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			NA	NA					
Adjacent Land Use										
Open space										
Remarks										
This site is located east of Highway 395 about 150 meters. It appears that this site was on the old alignment. There is a small pit less than one acre in size. The terrain is fairly flat with some overburden. There is no access to this site anymore. If we wish to use this ground in the future we will need to develop an access. This is a small amount of ground for a quarry site. This site will need a current survey to locate the boundaries.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



View looking east across Highway 395 at the small quarry site.



Aerial view of the small quarry site located east of Highway 395.

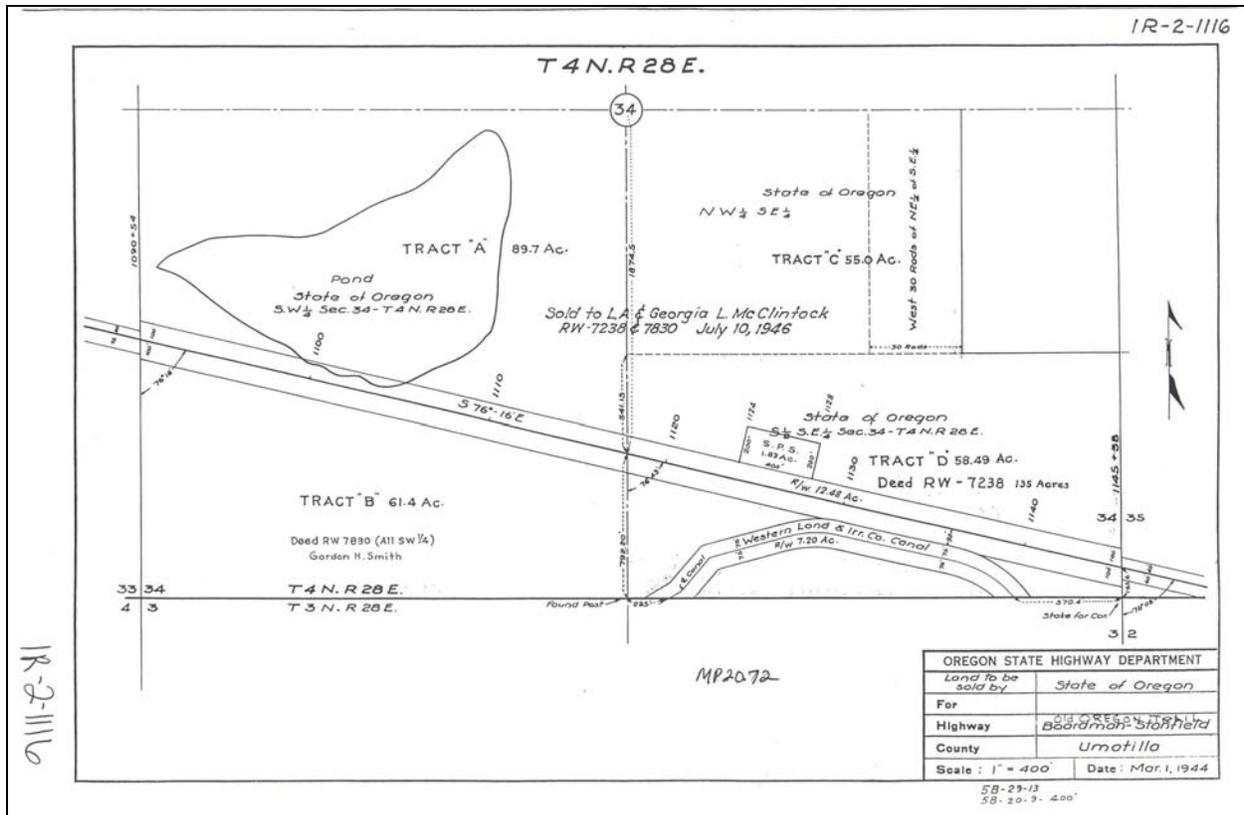
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla				12	0006	0	04N	28.0E	34
File ID		Source #	Date Visited	Map #			Type of Site		
08842, 08832B		30-911-5	08/10/2000	1R-2-1116			Raw Land		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
45 46'41.23000"	119 17'52.08000"	175	163.9	NA					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
NA	NA	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
NA			NA	120	1,600,000	2,592,000			
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			NA	NA				
Adjacent Land Use									
Farming/Open Space									
Remarks									
This is raw land on either side of I-84, 5 miles west of Stanfield Junction. There is no access to the property.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

N

SW



View of the large raw land site that is on either side of I-84.

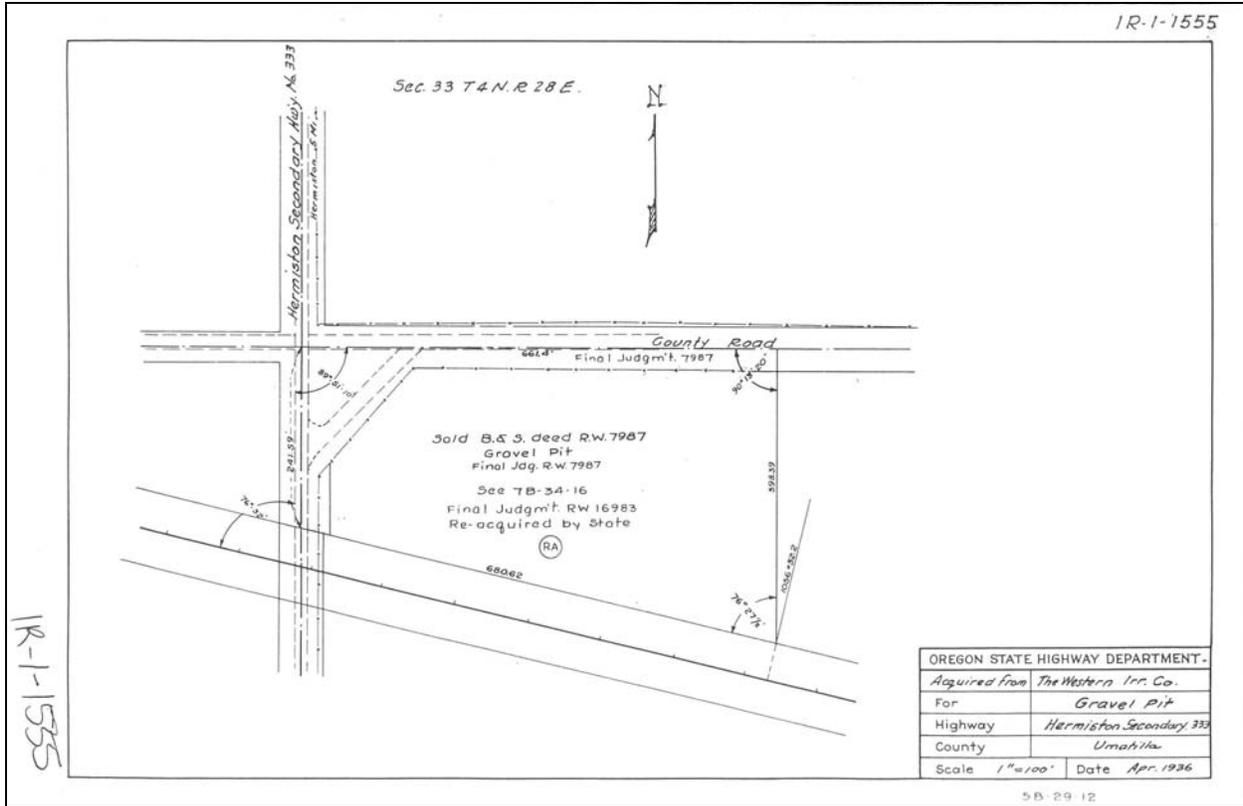


Aerial view of the raw land site located on either side of I-84.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla				12	0333	0	04N	28.0E	33
File ID		Source #	Date Visited	Map #			Type of Site		
24042		30-912-5	08/10/2000	1R-1-1555			Raw Land		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
45 47'02.58000"	119 19'16.87000"	158	3.93	NA					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
NA	Qgs	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
NA			NA	120					
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			Closed	NA				
Adjacent Land Use									
Farming									
Remarks									
This is raw land adjacent to the intersection of I-84 and Highway 207 (northeast corner). There is no aggregate/maintenance value.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									



View, looking from the county road, at the raw land site located at the intersection of I-84 and Highway 207.

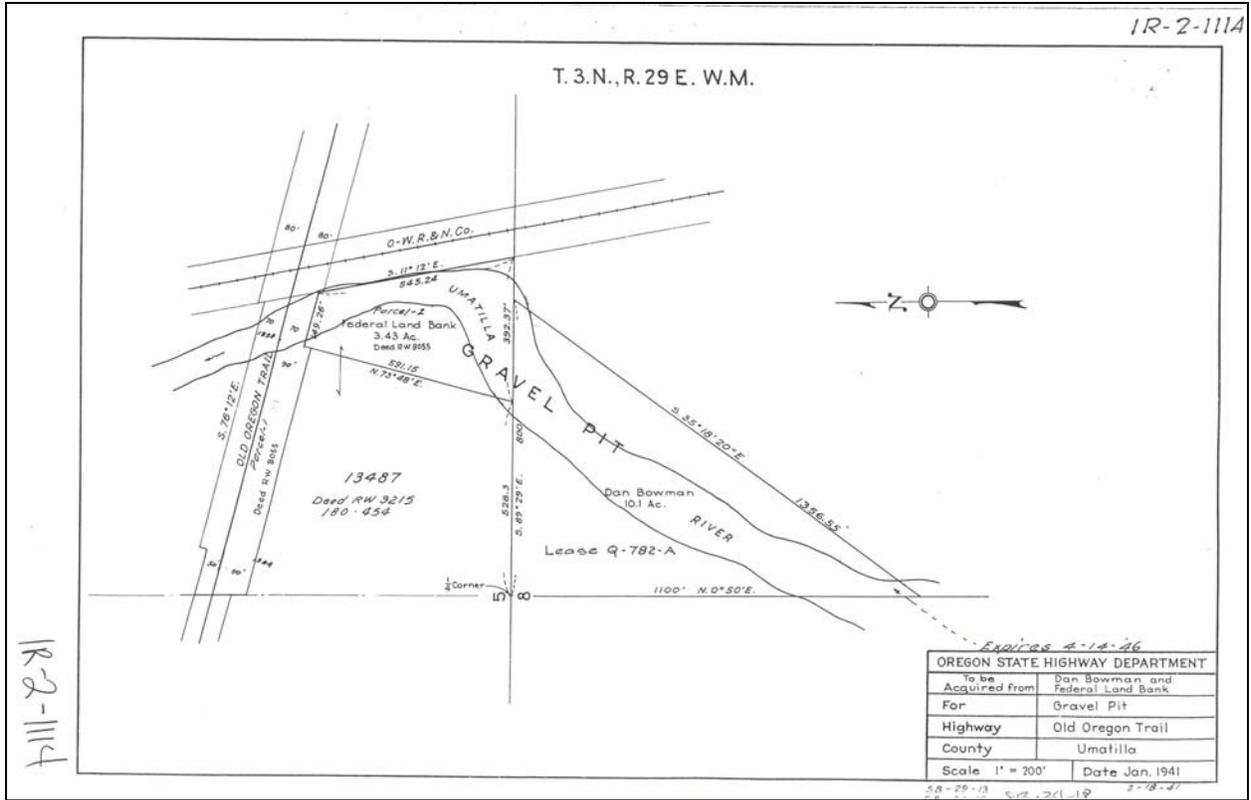


Aerial view of the raw land site at the intersection of I-84 and Highway 207.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla	Boardman Stanfield Gravel Pit			12	0006	0	03N	29.0E	05
File ID		Source #	Date Visited	Map #			Type of Site		
08832, 08832A		30-919-5	08/10/2000	1R-2-1114			Gravel		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
45 45'49.61000"	119 12'43.82000"	190	9.8	NA					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
Gravel	Qal	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
NA			NA	120					
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			NA	Umatilla River bisects the ground				
Adjacent Land Use									
Farming/Open Space									
Remarks									
This site is within the Umatilla River under Interstate 84. There is no access to the site any more. This site has mitigation potential.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									



View of the gravel site in the Umatilla River under I-84 eastbound.



Aerial view of the gravel site within the Umatilla River.

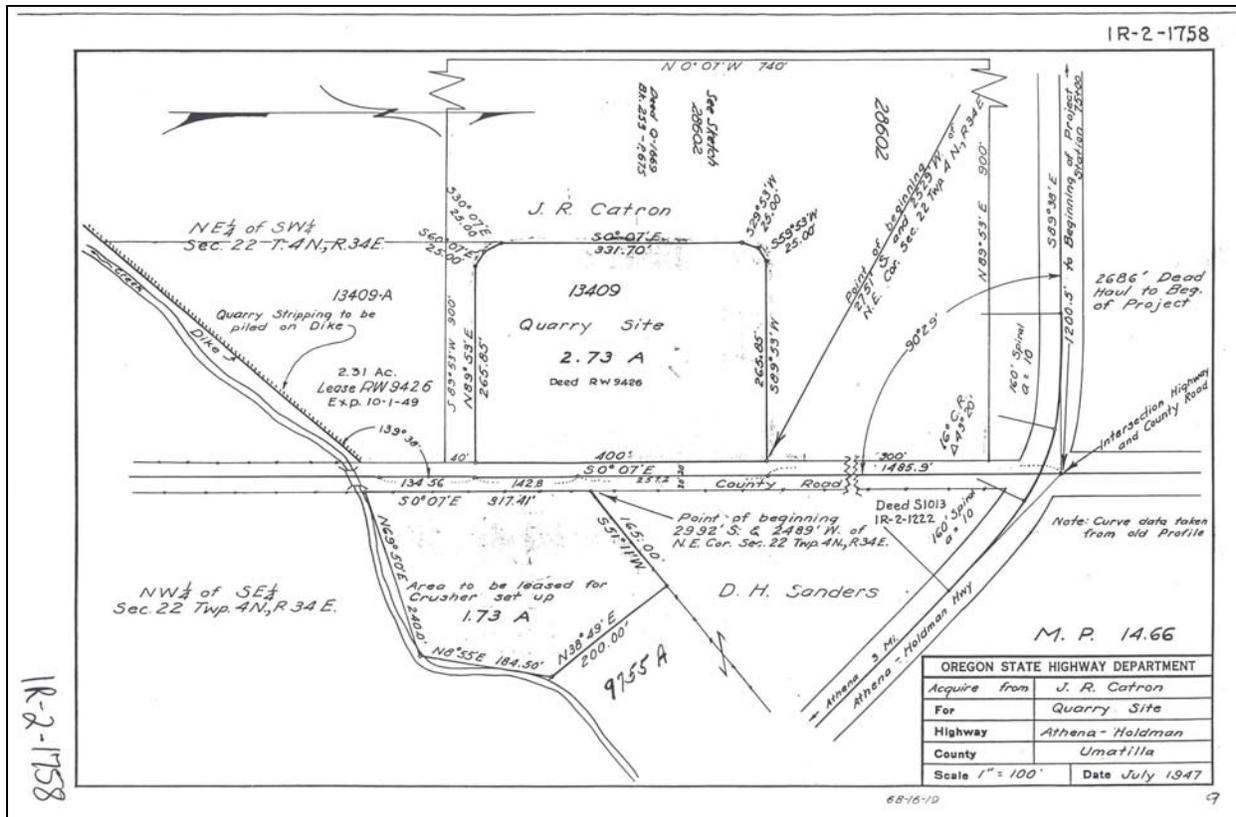
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla	Catron Pit				12	0334	14.7	04N	34.0E	22
File ID		Source #	Date Visited	Map #			Type of Site			
13409		30-921-5	08/09/2000	1R-2-1758			Quarry			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
45 48'40.79044"	118 32'59.65309"	511.867	2.73	<6	30-0004					
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color		Weathering			Jointing			
Basalt	Tcw	Medium Light Grey (N6)		Moderate			Highly Fractured			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair to Good			R2	188	100,000	150,000				
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	NA					
Adjacent Land Use										
Farming										
Remarks										
This site is adjacent to and west of Gerking Flat Road. The rock is a fine-grain, highly fractured basalt. There is heavy iron staining within the basalt at this location. There is no screening but ample room to work. The pit floor is at the gravel road level now. If we want more aggregate we will need to lower the pit floor. If we lowered the pit another 20 feet we could get about 160,000 cubic yards of material.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



View of the quarry site located adjacent to and west of Gerking Flat Road. The disturbance is much larger than the 2.73 acres that ODOT owns.



Close-up view of the pit face.

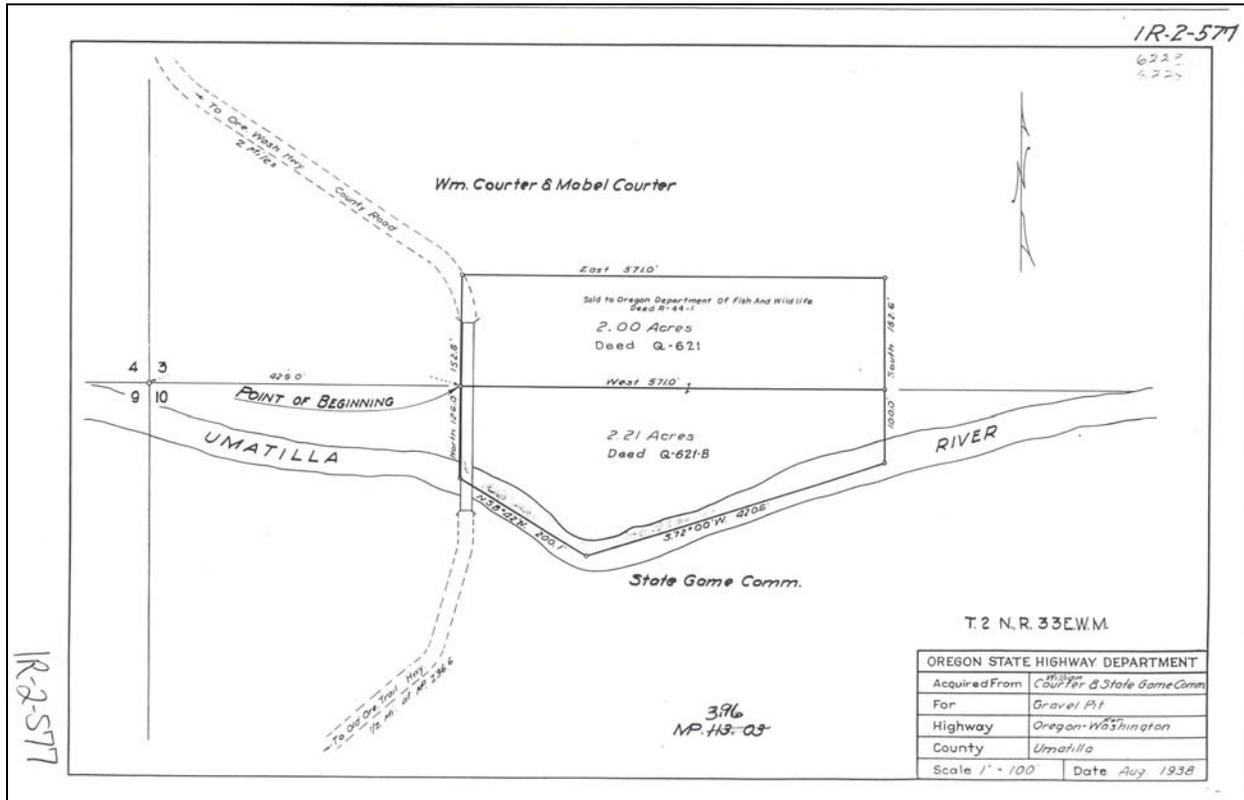


Aerial view of the quarry site located adjacent to and west of Gerking Flat Road.

County	Site Name	Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla		12	0008	0	02N	33.0E	03, 10
File ID		Source #	Date Visited	Map #		Type of Site	
06223, 06224		30-926-5	08/09/2000	1R-2-577		Gravel	
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #		
45 40'30.30000"	118 40'55.12000"	396	4.21	NA			
Comments							
Lat. and Long. acquired using Terrain Navigator Software							
Rock Type	Unit	Color	Weathering		Jointing		
Alluvium	Qal	NA	NA		NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)	
NA			NA	120			
Potentially Significant Site	Why			Open/Closed	Direction		
No	NA			Closed	Adjacent is the Umatilla River		
Adjacent Land Use							
Rural residential							
Remarks							
This site is east of the Umatilla Mission Highway and north of the Umatilla River on the old alignment. This site could have mitigation potential.							
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C
Material Use							



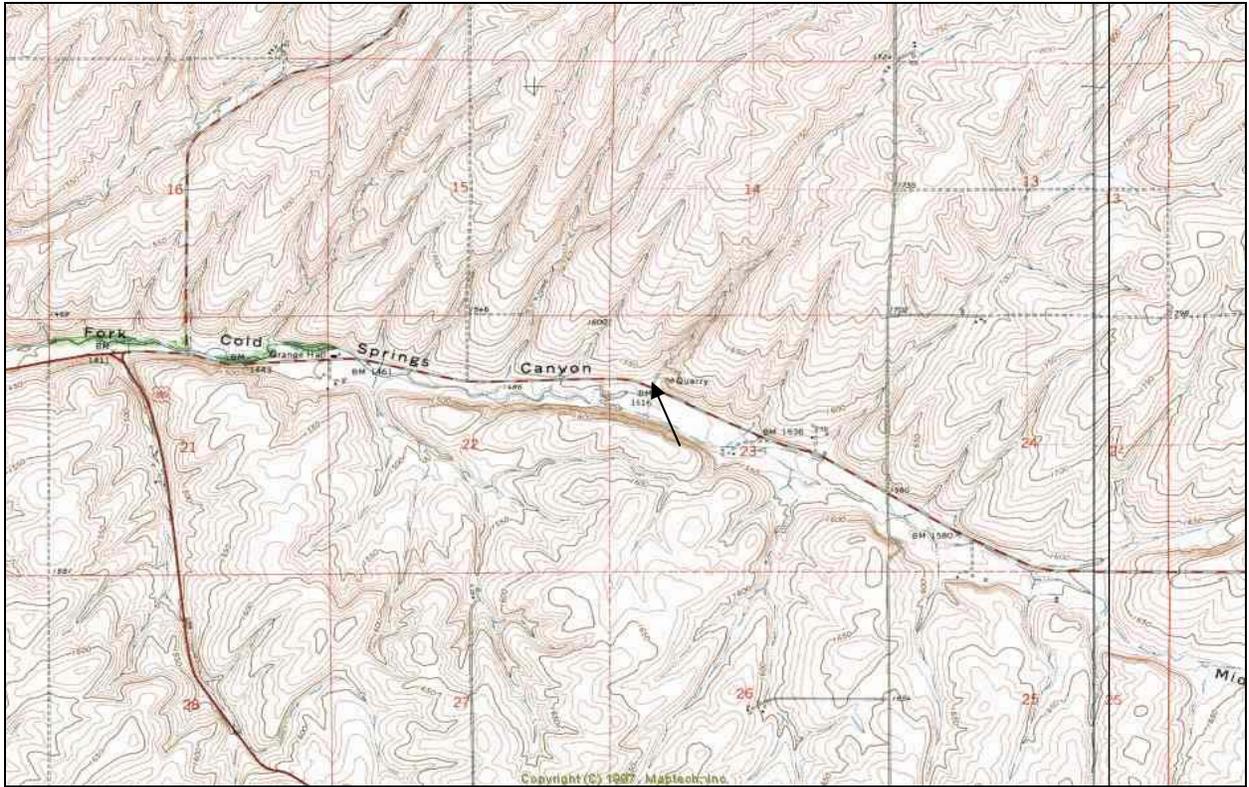
Aerial view of the gravel site located north of the Umatilla River.



County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Umatilla	Struve (HASCOM)				12	0334	2.0	04N	32.0E	23
File ID		Source #	Date Visited	Map #		Type of Site				
13446, 32303, 38342		30-999-5	08/09/2000	1R-2-1702		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
45 48'58.05000"	118 46'58.03000"	487	13.66	<4	30-0067					
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering		Jointing				
Basalt	Tcw	Medium Dark Grey (N4)		Slight		Highly Fractured				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good			R3	155	50,000	75,000				
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	NA					
Adjacent Land Use										
Farming										
Remarks										
This site is adjacent to and north of Highway 37. The material is composed of a fine-grain, highly fractured basalt. The quarry is almost depleted of aggregate after this site was used for the paving of Highway 37 during the year 2000. There is a large amount of stock pile material left over. There is room to work with limited screening. You could rip the rock.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



View looking south at the quarry site located north of Highway 37.

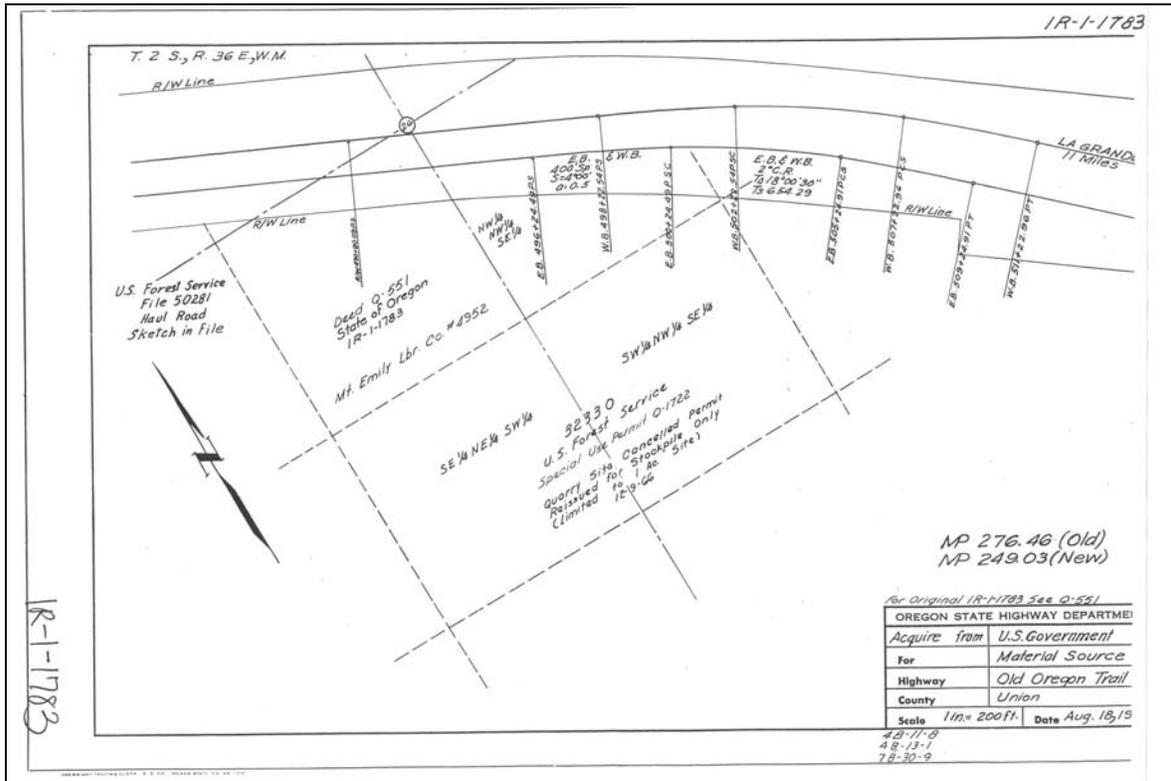


Aerial view of the quarry site located north of Highway 37.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Union					12	0006	249.0	02S	36.0E	26
File ID		Source #	Date Visited	Map #		Type of Site				
04952		31-001-5	08/15/2000	1R-1-1783		Maintenance Yard				
Latitude		Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #				
45 21'46.67000"		118 16'29.17000"	1097	9.27	NA					
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
NA	Tcg	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
NA			NA	0						
Potentially Significant Site	Why				Open/Closed	Direction				
NA	NA				NA	NA				
Adjacent Land Use										
Open space										
Remarks										
This site is adjacent to and south of Interstate 84. It appears this ground is being used for one of our sanding sheds and a stock pile site.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



View of the sanding shed located south of I-84.



Aerial view of the sanding shed and stockpile site located adjacent to I-84.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Wheeler					12	0005	61.59	06S	21.0E	35
File ID		Source #	Date Visited	Map #			Type of Site			
03760		35-003-5	06/14/2000	1R-1-1619			Raw Land			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #				
44 59'33.15000"	120 09'50.25000"	960	5.35	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
Basalt	Tc	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
NA			NA	150	80,000	162,000				
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	NA					
Adjacent Land Use										
Open space										
Remarks										
This site is north of Highway 19 approximately 1300 feet. The access is not evident anymore and I did not hike in to evaluate the ground. The quantity is based on past records.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



Aerial view of the raw land site located north of Highway 19 approximately 1300 feet.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Wheeler					12	0005	61.7	07S	21.0E	02
File ID		Source #	Date Visited	Map #		Type of Site				
15907, 15906		35-004-5	06/14/2000	1R-2-1990		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
44 59'20.85705"	120 9'52.59578"	890.7	4.3	<1						
Comments										
GPS acquired at the access point and Highway 19.										
Rock Type	Unit	Color		Weathering		Jointing				
Andesite	Tca	Olive Grey (5Y 4/1)		Slight		Highly Fractured				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair to Good			R3+	160	70,000	151,200				
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	Adjacent to Butte Creek					
Adjacent Land Use										
Open space										
Remarks										
This site is located adjacent to and north of Highway 19. The rock is a fine-grain, platy andesite with interfingering debris flows. There is moderate amount of rip rap at this site. There is no screening from the highway and limited room to work. You will need to work from the top down here as the cliffs are very dangerous to work around. You might be able to rip the material, but I suggest shooting the rock.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

N

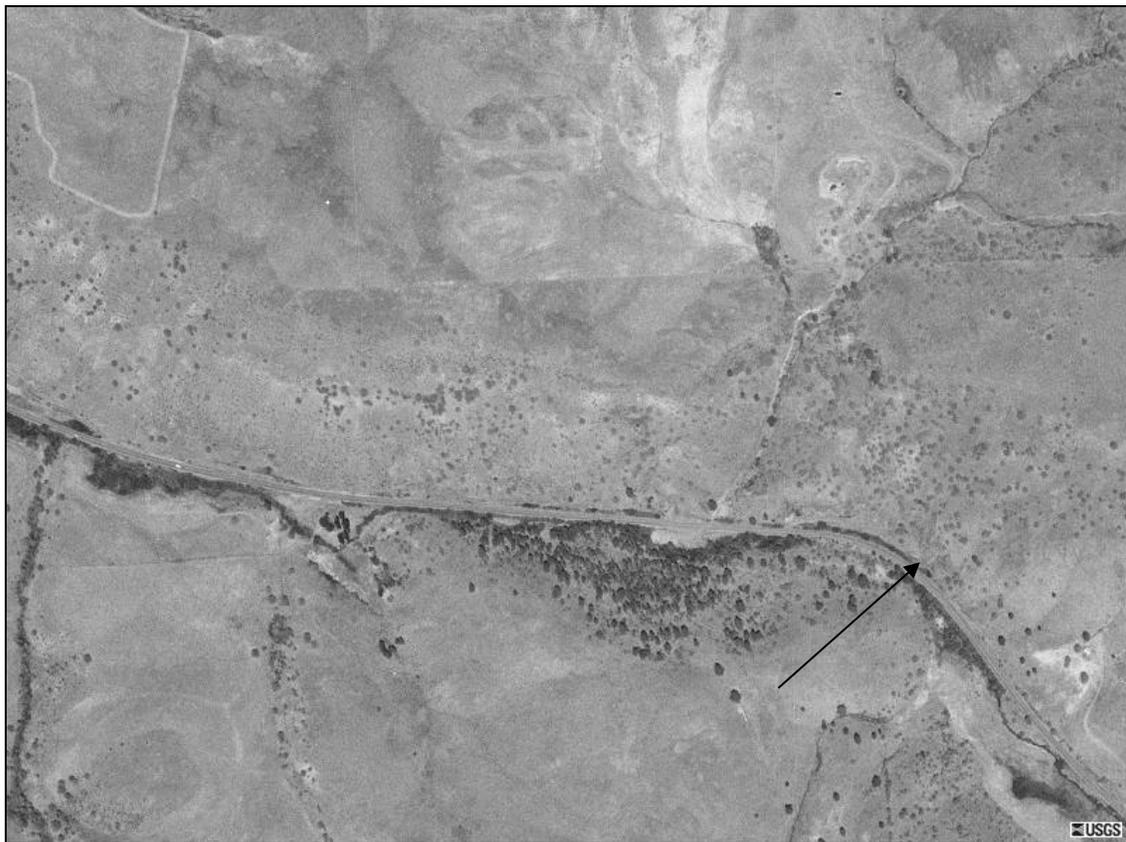
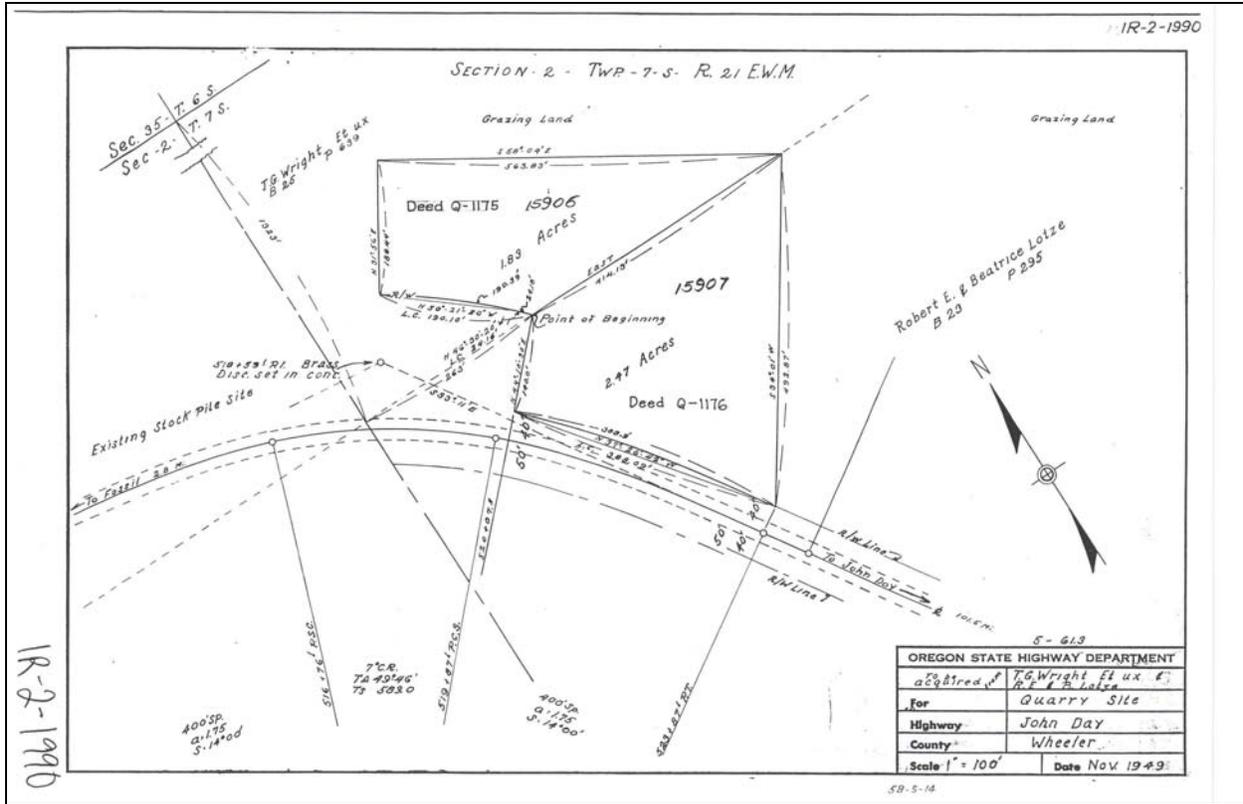
SE



View of the quarry site looking across Highway 19 to the north.



Close-up view of the highly fractured andesite that comprises the quarry face.

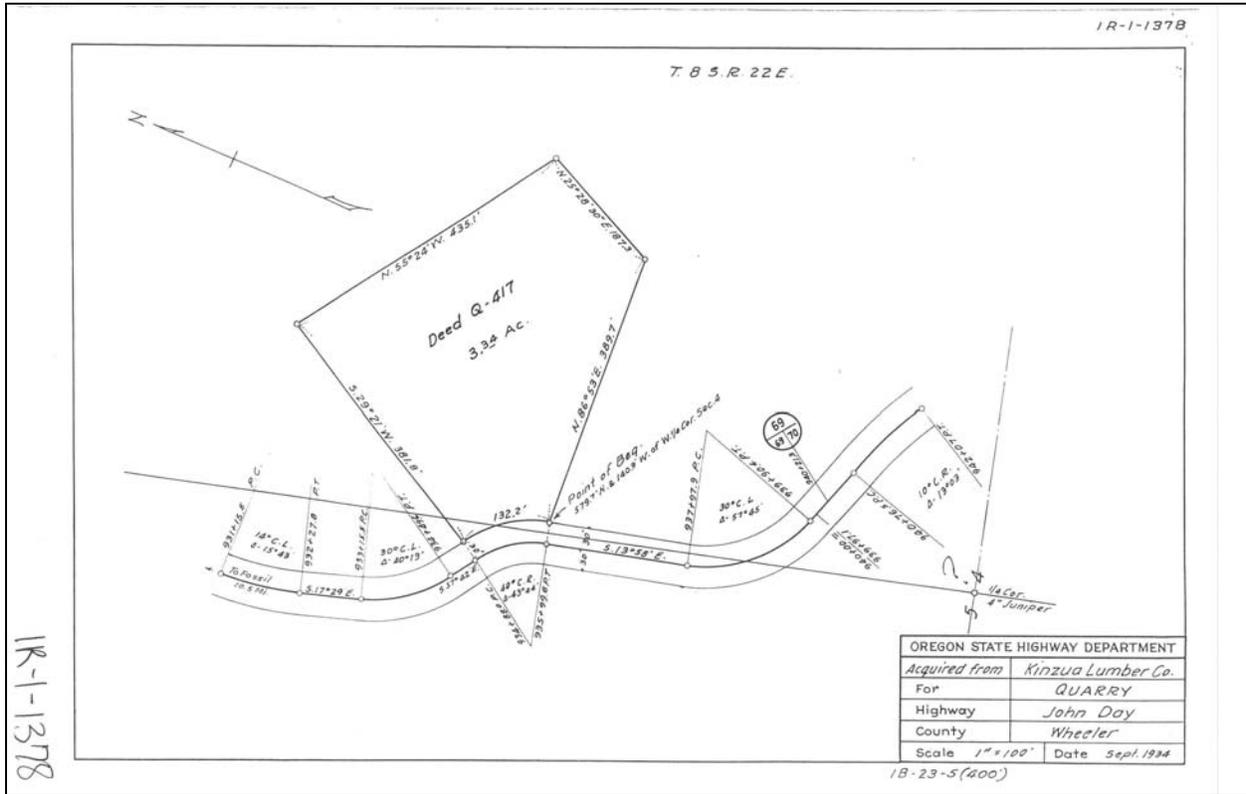


Aerial view of the quarry site located north of Highway 19.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Wheeler				12	0005	68.9	08S	22.0E	04
File ID		Source #	Date Visited	Map #			Type of Site		
01729		35-005-5	06/13/2000	1R-1-1378			Raw Land		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
44 54'17.56000"	120 06'26.02000"	1216	3.34	NA					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
Debris Flow	Tca	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Poor			R2	120					
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			Closed	NA				
Adjacent Land Use									
Open space									
Remarks									
This site has been consumed by the new alignment of Highway 19 and is right-of-way now at the summit. The rock here is of poor quality and has little to no value for highway construction.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
2.53	2.67	14.8	10.5	3.7			15.4	1.0	
Material Use									
AC (1986)									



Aerial view of the raw land site which is now right-of-way for Highway 19.



County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Wheeler					12	0005	70.25	08S	22.0E	11
File ID		Source #	Date Visited	Map #			Type of Site			
26079		35-006-5	06/13/2000	1R-5-978			Raw Land			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
44 53'31.02000"	120 04'02.27000"	990	20.26	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
Debris Flow	Tca	NA		Moderate			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Poor			R2	120	160,000	259,200				
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	West about 300 meters is Service Creek					
Adjacent Land Use										
open space										
Remarks										
This site is along the old alignment of Highway 19. The exposed rock here is a debris flow of poor quality. The local property owner has fenced us out. There is no screening, with little to no room to work. The terrain is gradual to moderate about 8 to 12 degrees. There could be up to 8 feet of overburden here.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

NW

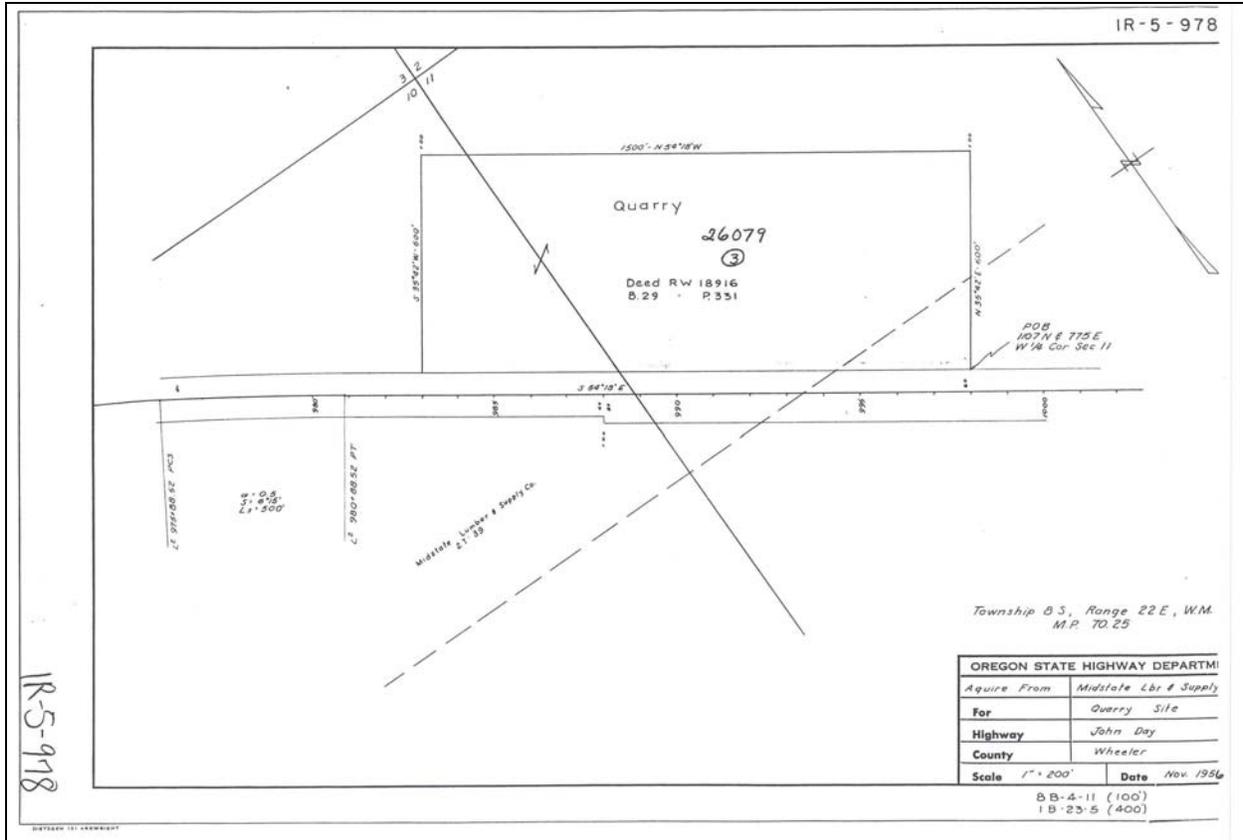
SE



View of the raw land site along the old alignment of Highway 19.



Close-up view of the poor quality debris flow.



Aerial view of the raw land site located along Highway 19.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Wheeler				12	0005	90.1	08S	24.0E	35
File ID		Source #	Date Visited	Map #			Type of Site		
03016, Q0435		35-009-5	06/13/2000	1R-1-1534, 1R-1-1509, 4B-25-14			Raw Land		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
44 49'50.95000"	119 49'38.41000"	548	48.12	NA					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color	Weathering			Jointing			
Volcanic Gravel	Qal	NA	NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Fair to Good			NA	120	755,000	1,223,100			
Potentially Significant Site	Why			Open/Closed	Direction				
No	Part is USA Ground			Closed	On either side of the John Day River				
Adjacent Land Use									
Open Space/Ranching									
Remarks									
This site is raw land with no visible disturbances. It is adjacent to and south of Highway 19 and on either side of the John Day River. The ground is being used for livestock grazing and irrigation by the adjacent property owner. The property is 10 feet below the highway and 6 feet above the river. There is no screening and ample room to work. The ground on the south side of the river has no access. The lithology is a basalt within the Columbia River group. The terrain varies from flat to a moderate slope of about 10 degrees.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									



View of the raw land site looking south across Highway 19.

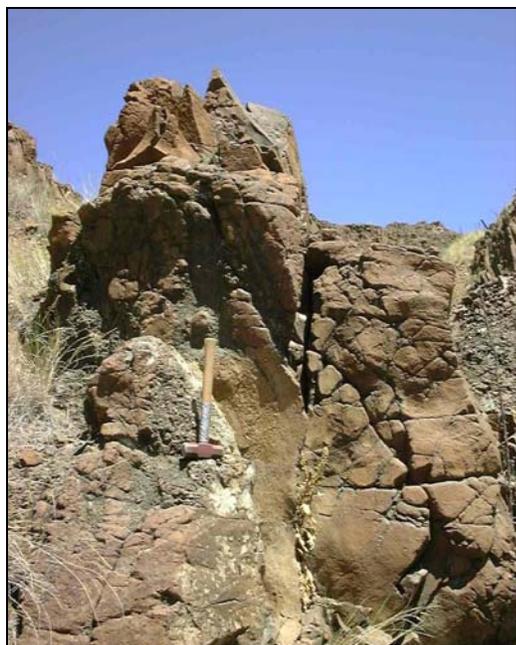
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Wheeler					12	0005	102.9	09S	25.0E	23
File ID		Source #	Date Visited	Map #		Type of Site				
06439		35-010-5	06/13/2000	1R-2-731		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
44 46'39.60032"	119 40'49.57058"	559.702	3.86	<1						
Comments										
GPS acquired at access point.										
Rock Type	Unit	Color		Weathering		Jointing				
Basalt	Tcp	Medium Dark Grey (N4)		Slight to Moderate		Highly Fractured				
Quality		Hardness		lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Poor to Good		R2+ to R3+		170	60,000	137,700				
Potentially Significant Site	Why	Open/Closed		Direction						
No	NA	Closed		South across Highway 19 about 200 meters is the John Day River						
Adjacent Land Use										
Open space/one ranch to the east approximately 350 meters										
Remarks										
This site is adjacent to and north of Highway 19. The rock is a medium-grain basalt that has varying igneous lithologies mixed together. Some of the rock is a fine-grain good quality basalt and some is a poor quality basalt. There is no screening from the highway and no room to work. This site has moderately steep terrain. There is a moderate amount of staining and secondary mineral alteration.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

W

NE

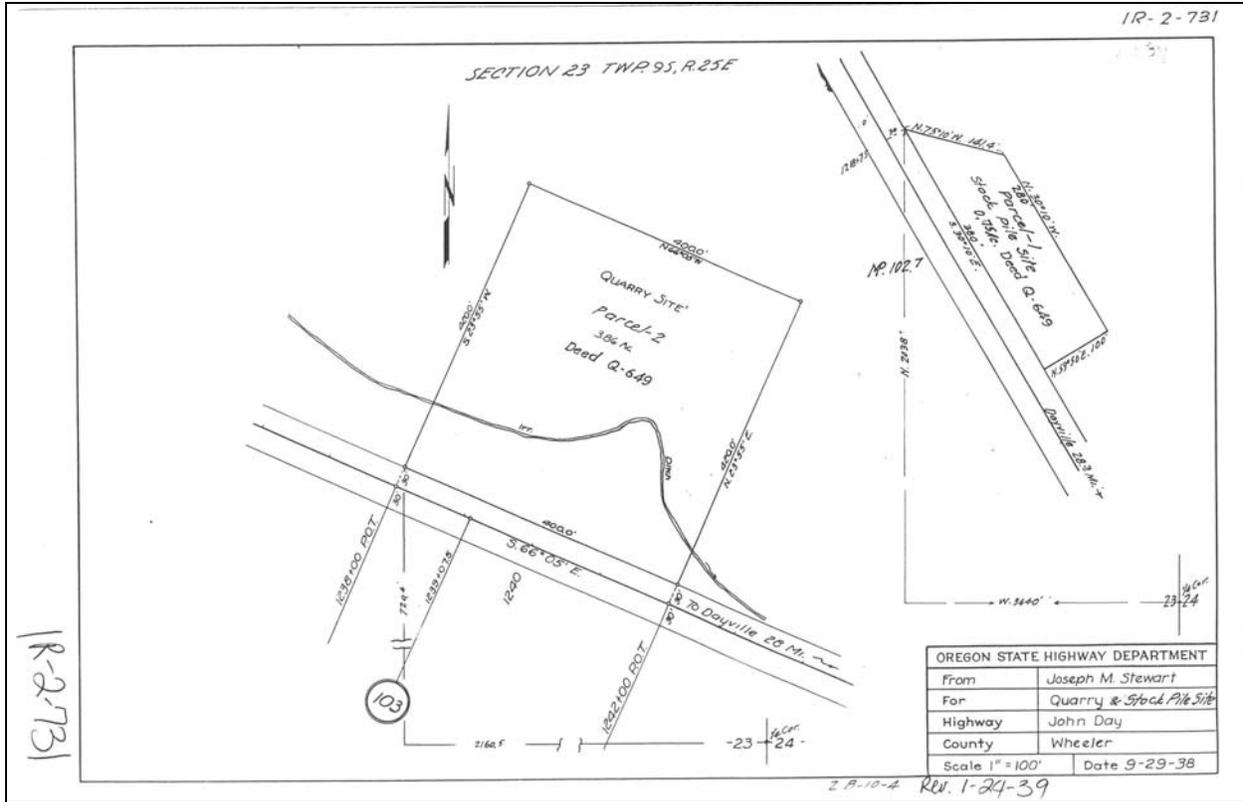


View of the quarry site located adjacent to and north of Highway 19.



Close-up view of the medium grain basalt found at this quarry site.

35-010-5



Aerial view of the quarry site that is located north of Highway 19.

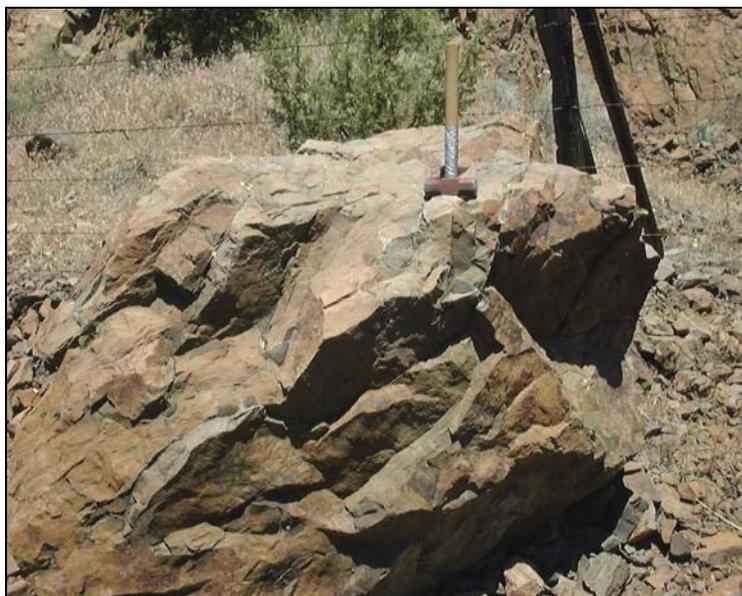
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Wheeler				12	0005	61.4	07S	21.0E	02
File ID		Source #	Date Visited	Map #			Type of Site		
25953, 03763		35-036-5	06/14/2000	1R-1-1620			Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
44 59'22.85547"	120 10'16.72314"	877.656	4.25	<1					
Comments									
GPS acquired adjacent to Highway 19 and the quarry.									
Rock Type	Unit	Color		Weathering			Jointing		
Andesite	Tca	Olive Grey (5Y 4/1)		Slight			Massive		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Good to Fair			R3+	160	70,000	151,200			
Potentially Significant Site	Why	Open/Closed	Direction						
No	NA	Closed	South across Highway 19 about 100 meters is Butte Creek						
Adjacent Land Use									
Open space									
Remarks									
This site is located adjacent to and north of Highway 19. The rock is a fine-grain andesite that is massive and can produce a lot of rip rap. There is no screening with limited room to work. If we wish to use this site in the future we will need to develop the quarry from the top down. You will need to drill and blast. There is a minor debris flow in the area that is associated with the andesite. It would be considered as overburden and worthless. The terrain is moderately steep about 10 to 12 degrees.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

NW

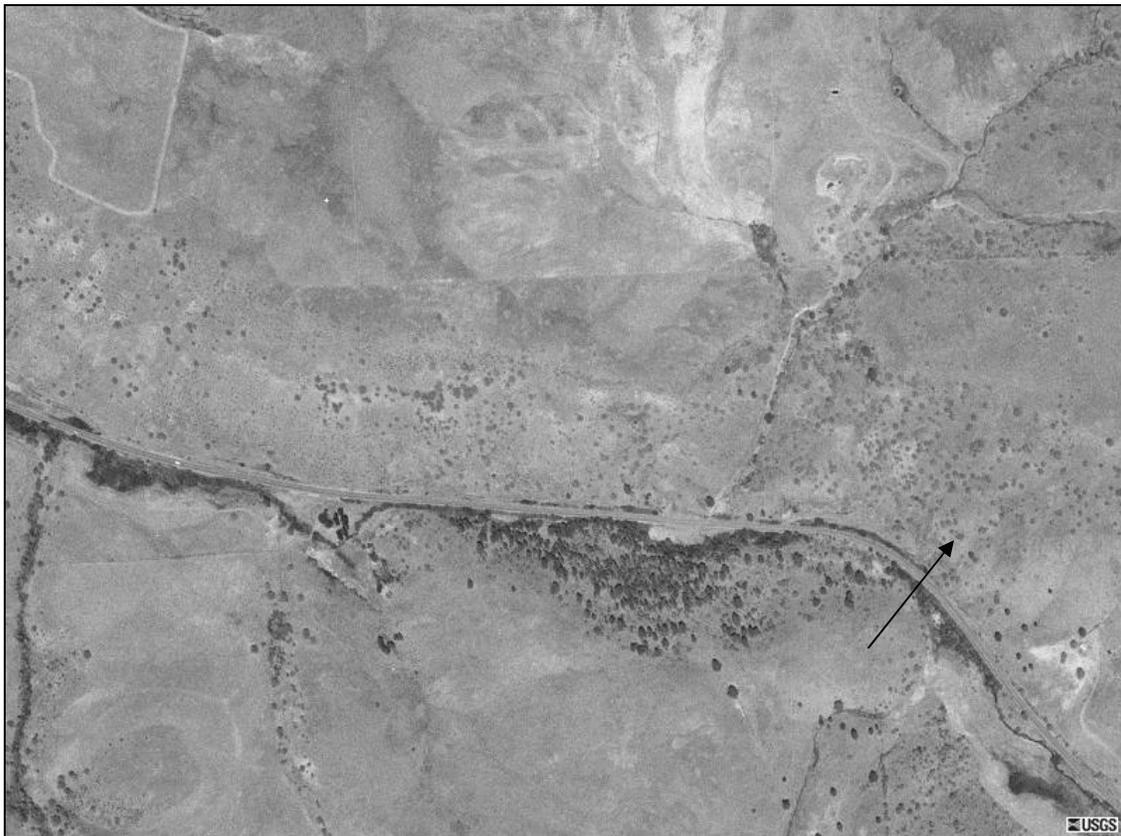
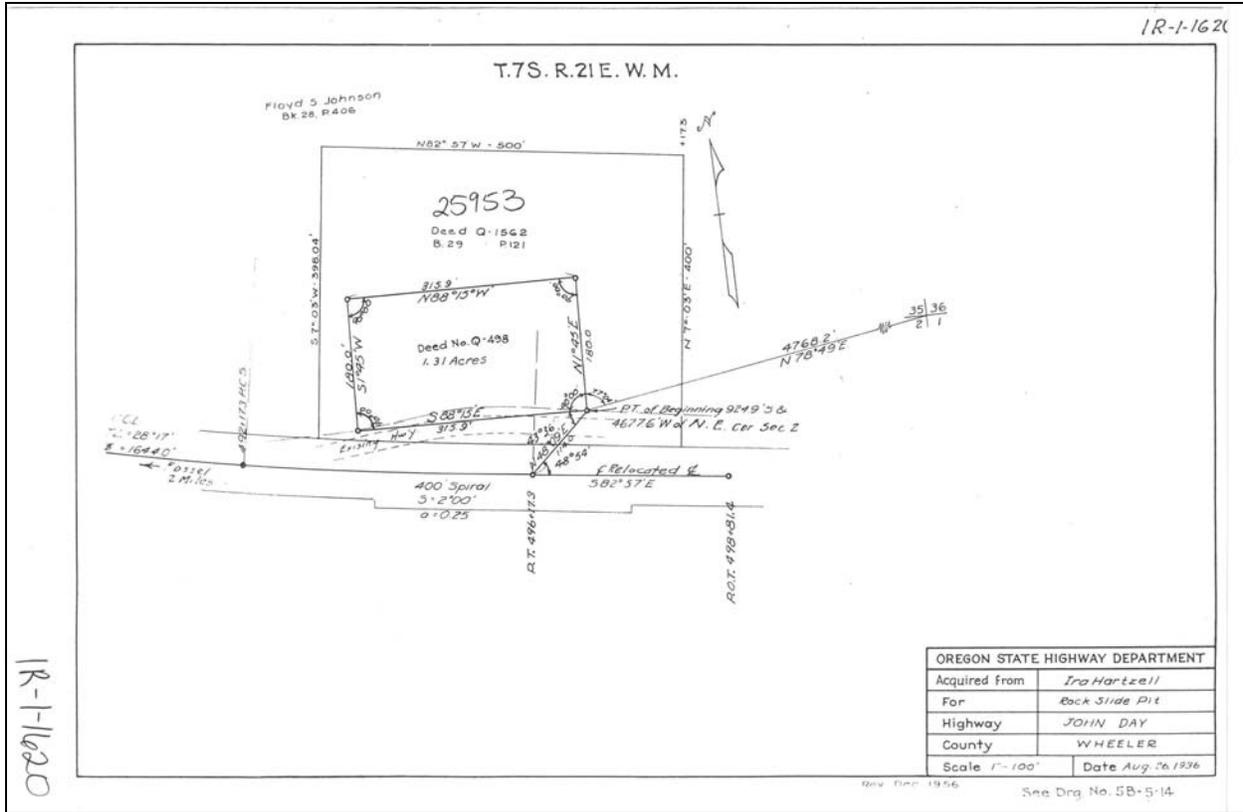
E



View looking north across Highway 19 at the quarry site.



View of the fine-grain andesite found at this site.



Aerial view of the quarry site located north of Highway 19.

County	Site Name	Dist	Hwy	Mile Pt	TWP	RGE	Sect	
Wheeler		12	0005	66.15	07S	22.0E	28, 29	
File ID		Source #	Date Visited		Map #		Type of Site	
09751A, 05375		35-037-5	06/13/2000		1R-2-508		Raw Land	
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #			
44 56'04.25972"	120 07'05.71230"	1033.317	3.75	NA				
Comments								
GPS acquired at the access gate.								
Rock Type	Unit	Color		Weathering		Jointing		
Basalt	Tca	NA		NA		NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)		
Fair to Good			NA	150	40,000	81,000		
Potentially Significant Site	Why			Open/Closed	Direction			
No	NA			Closed	NA			
Adjacent Land Use								
Open space								
Remarks								
This site is located east of Highway 19 about 1200 meters. There is a small, one acre stock pile site adjacent to the highway that is associated with the property. This is raw land with no visible disturbances. Someone has been cutting trees on and around our site. The terrain is moderately steep around 15 degrees.								
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.
Material Use								

NW

NE



View of the raw land site located east of Highway 19 about 1200 meters.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Wheeler	Mortimer Ranch				12	0005	75.64	08S	22.0E	36
File ID		Source #	Date Visited	Map #		Type of Site				
06435, 26855		35-039-5	06/13/2000	1R-2-735		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
44 49'46.91957"	120 01'49.69147"	661.933	5.73	<5	35-0016					
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color		Weathering		Jointing				
Basalt	Tcp	Greenish Black (5G 2/1)		Slight		Moderately Fractured				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good to Fair			R3	177	95,000	227,003				
Potentially Significant Site	Why	Open/Closed	Direction							
No	NA	Closed	West across Highway 19 about 150 meters is Service Creek							
Adjacent Land Use										
Open space/one ranch to the northwest about 700 meters										
Remarks										
This site is located adjacent to and east of Highway 19. The rock is a fine-grain basalt with minor intermixed poor quality basalts. Some of the layers are decomposing, otherwise you have a good hard basalt. There is no screening with plenty of room to work. You can rip the rock. This property is also used as a stock pile site. The quarry face is about 30 to 40 feet tall. The terrain is moderately steep, about 10 degrees. This site is getting close to being depleted. The property is along the old highway alignment.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.84	2.86	16.1	4.6	1.6			18.0	0.8		
Material Use										
AC (1992)										

N

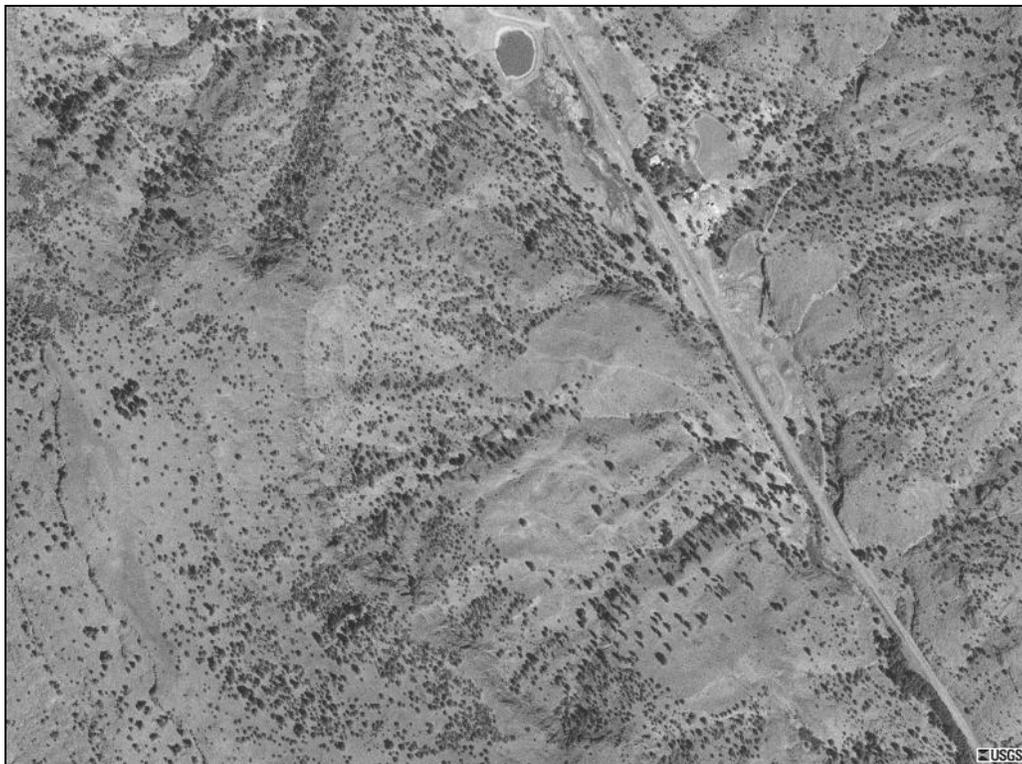
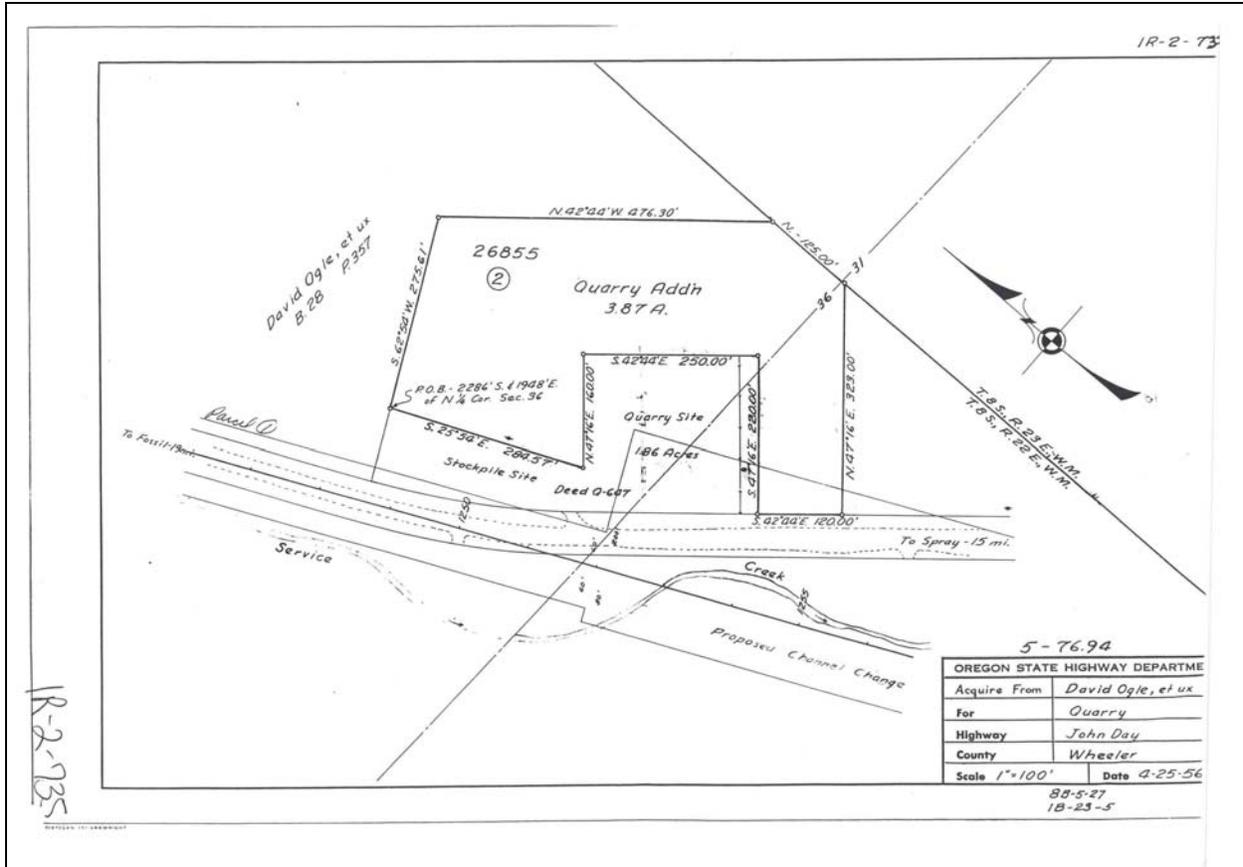
SE



View of the quarry site located adjacent to and east of Highway 19.



View of the quarry face and the fine-grain basalt.



Aerial view of the quarry site located east of Highway 19.

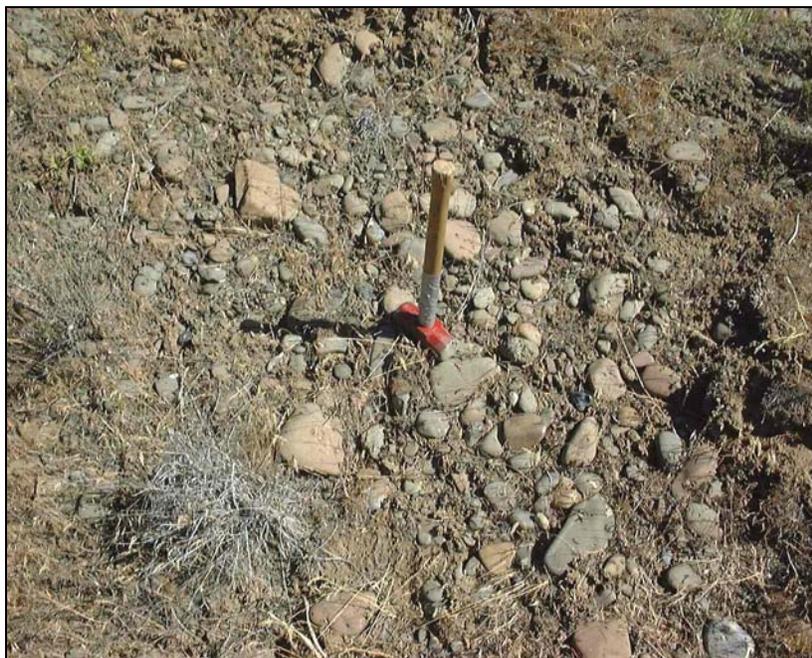
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Wheeler					12	0005	97.8	09S	25.0E	08
File ID		Source #	Date Visited	Map #			Type of Site			
23024		35-041-5	06/13/2000	1R-5-662			Gravel			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
44 48'36.34113"	119 44'14.71204"	543.613	24.1	NA						
Comments										
GPS acquired on the site.										
Rock Type	Unit	Color		Weathering			Jointing			
Volcanic Gravel	Qal	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
NA			NA	120	80,000	129,600				
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	Adjacent to the west is the John Day River					
Adjacent Land Use										
Open space										
Remarks										
This site is located west of and adjacent to Highway 19. The property is used for a stockpile site now. There is a small quantity of volcanic gravel interfingered with the tuffs at this location. This property is 20 feet below the highway and 8 feet above the river. There is a gate but it was open and the area is used for river access. There is no screening but room to work.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

SW

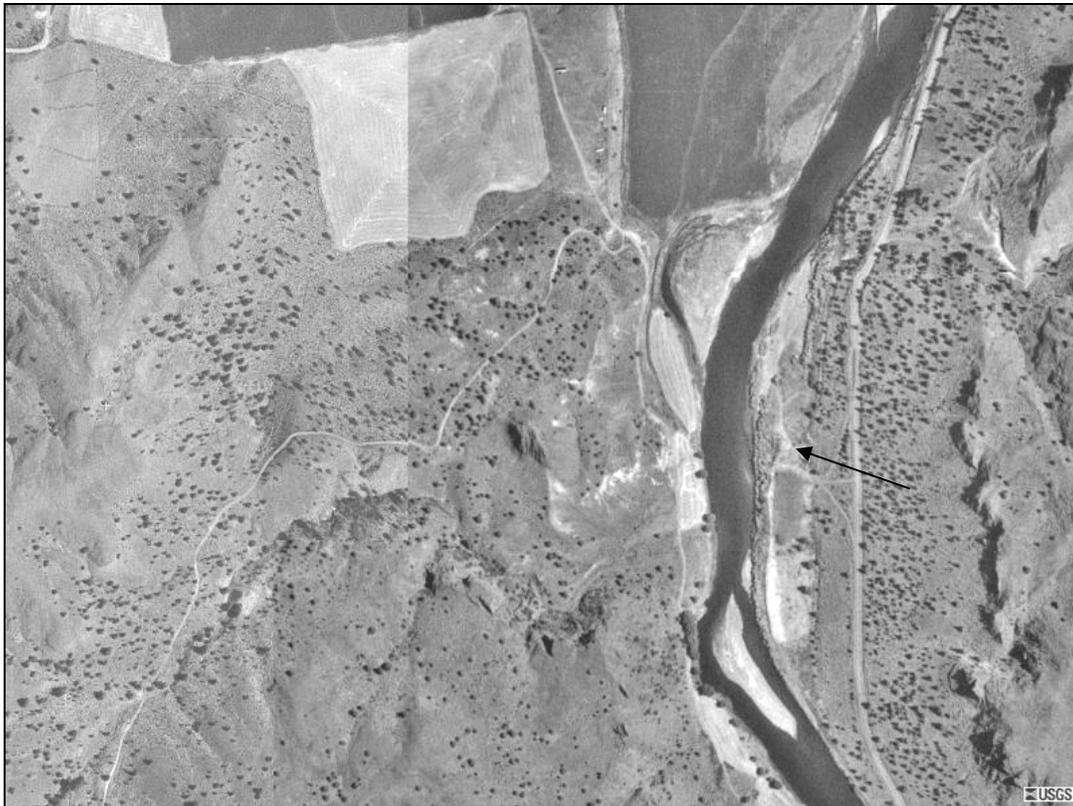
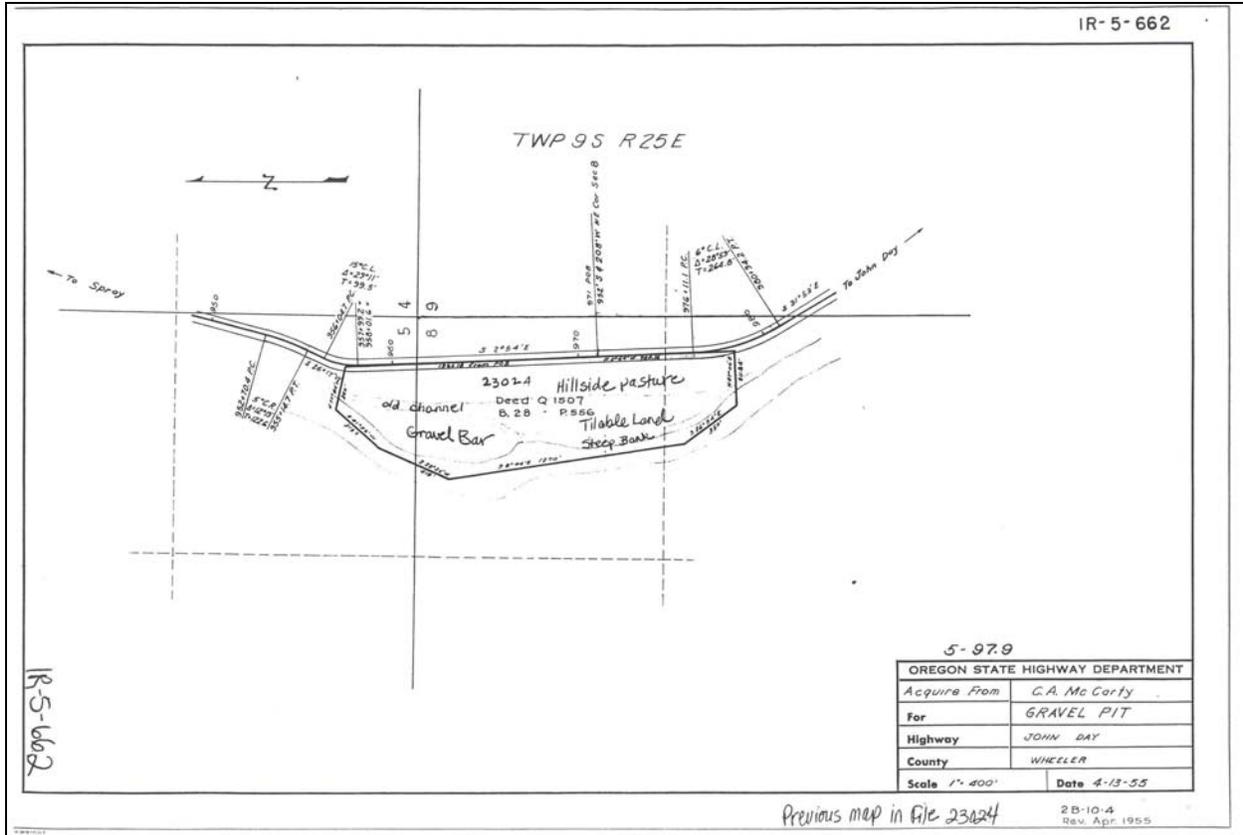
N



View of the gravel site that is now used as a stock pile site.



Close-up view of the material at this site.



Aerial view of the quarry site now used as a stockpile site located to the west of Highway 19.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Wheeler					12	0005	62.650	06S	22.0E	33
File ID		Source #	Date Visited	Map #		Type of Site				
13515		35-903-5	06/14/2000	1R-2-1710		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
45 00'04.72662"	120 06'02.48815"	1209.013	9.05	<2						
Comments										
GPS acquired in the first pit.										
Rock Type	Unit	Color		Weathering		Jointing				
Basalt	Tca	Olive Grey (5Y 4/1)		Moderate to Slight		Highly Fractured				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair			R3	166	220,000	493,020				
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	NA					
Adjacent Land Use										
Open space										
Remarks										
This site is about 4 miles east of Highway 19 on Kinzua Lane. The rock is a fine-grain basalt that is highly fractured. There is some moderate weathering with heavy staining. There is good screening and plenty of room to work. You can rip the rock. There is little to no overburden.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

NW

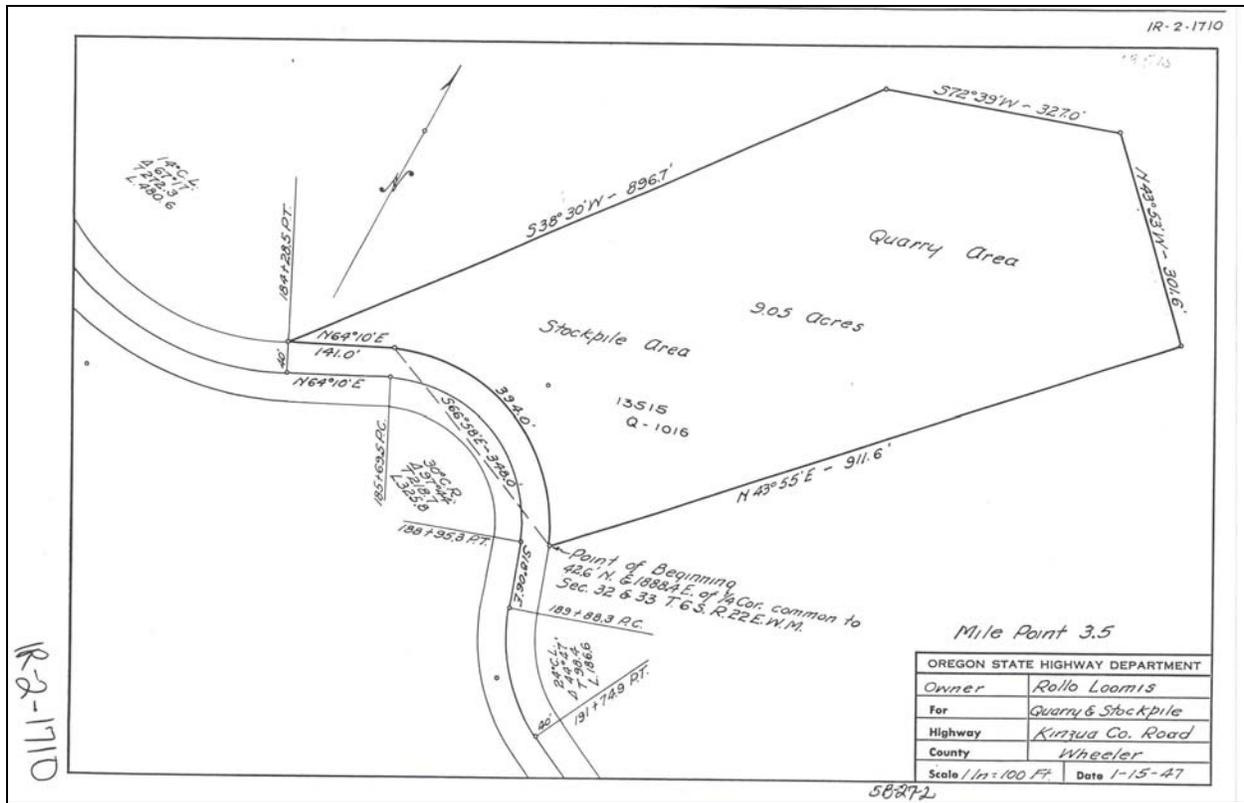
E



View of the quarry site located 4 miles east of Highway 19 on Kinzua Lane.



Close-up view of the highly fractured basalt found at the site.



Aerial view of the quarry site located along Kinzua Lane, 4 miles east of Highway 19.