

LIST OF SITES IN DISTRICT 14

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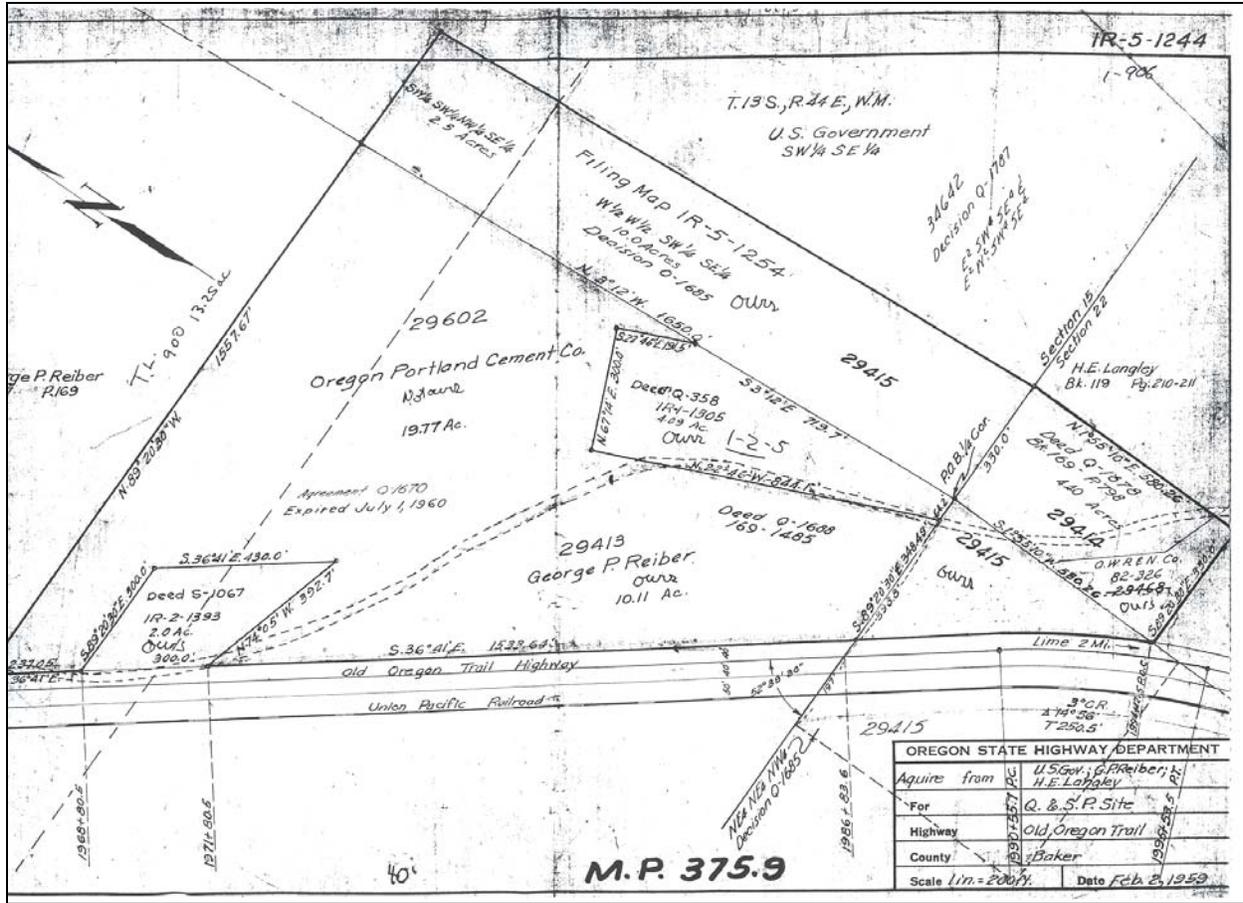
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23-955-5	282
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County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Baker				14	0006	339.3	13S	44.0E	15
File ID		Source #	Date Visited	Map #			Type of Site		
34642, 29415, 29602, S1067, Q0358, 29414		01-002-5	04/18/2001	1R-1-1305, 1R-5-1254, 1R-5-1244, 1R-2-1393			Raw Land		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
44 26'04.03000"	117 19'13.39000"	731	62.04	NA					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
Ash Flow Tuff	Tc	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Fair			NA	155	560,000	940,000			
Potentially Significant Site	Why	Open/Closed	Direction						
No	NA	Closed	West across the freeway approximately 300 meters is the Burnt River.						
Adjacent Land Use									
Open Space									
Remarks									
This ground is east of and adjacent to I-84. There is no access to this site anymore. The material is an ash flow tuff of unknown quality. The terrain is moderate to steep. There is no screening with room to work. All future work should proceed from the top down.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
2.39	2.44	23.3	6.0	6.2			15.7	0.9	
Material Use									
AC (1991)									

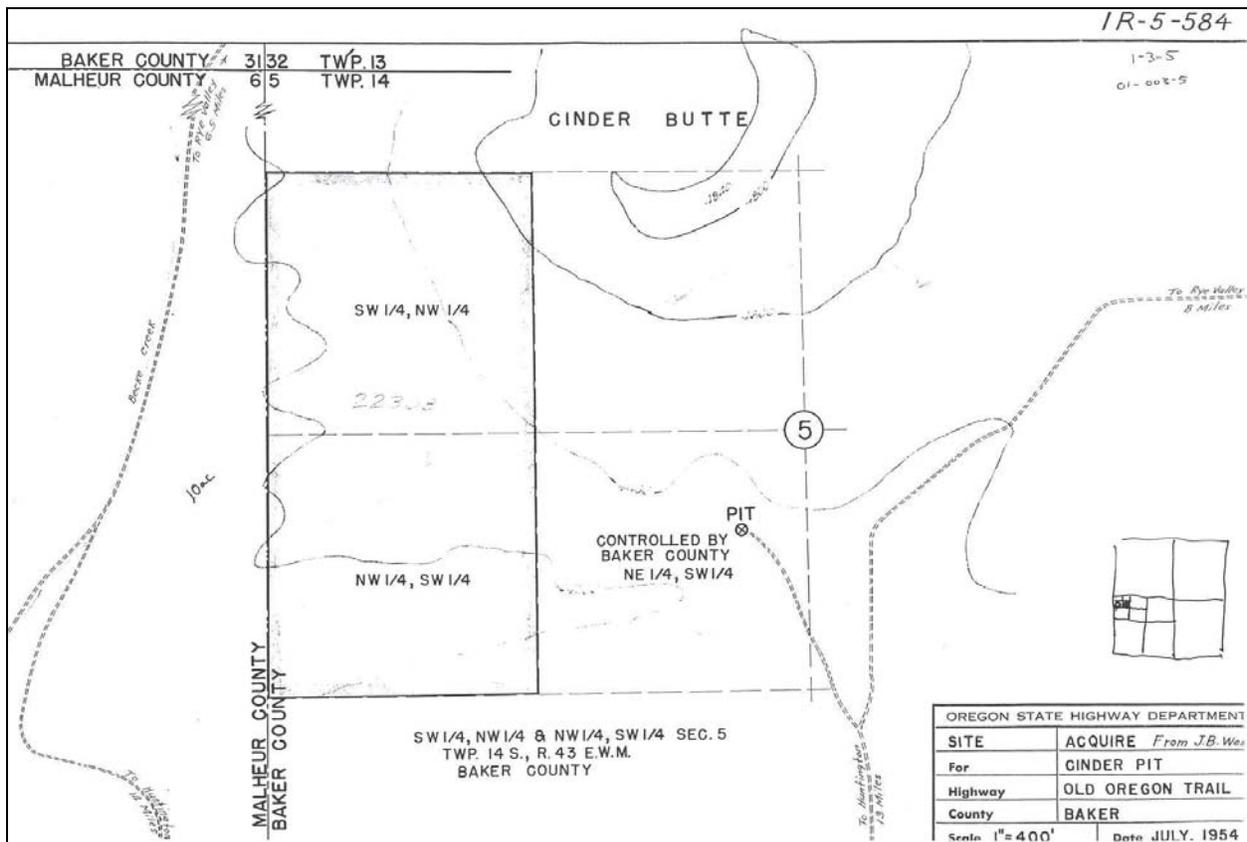


View of the raw land site looking from I-84.



Aerial view of the raw land site adjacent to I-84.

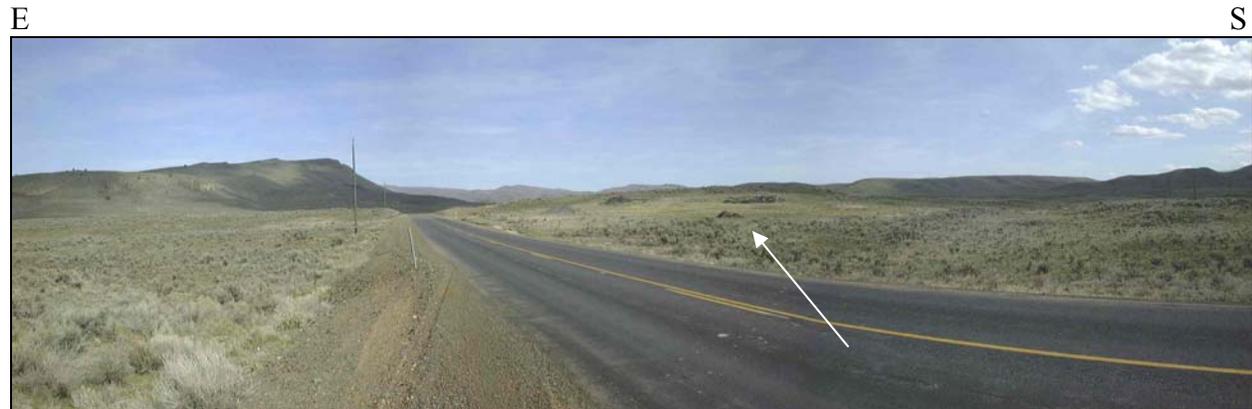
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Baker				14	0006	345.1	14S	43.0E	05
File ID		Source #	Date Visited	Map #			Type of Site		
22308		01-003-5	04/18/2001	1R-5-584			Cinder Pit		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
44°22'43.54000"	117°28'40.84000"	1339	80	Multiple		01-0064			
Comments									
Lat. and Long. acquired using Terrain Navigator Software.									
Rock Type	Unit	Color		Weathering			Jointing		
Cinder	Tp	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Good			NA	155	0	0			
Potentially Significant Site	Why	Open/Closed	Direction						
No	USA Ground	Closed	NA						
Adjacent Land Use									
Open Space									
Remarks									
There is no access to this site from the County Road. All of the gates are locked. MP 345.1 Cinder Butte									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									



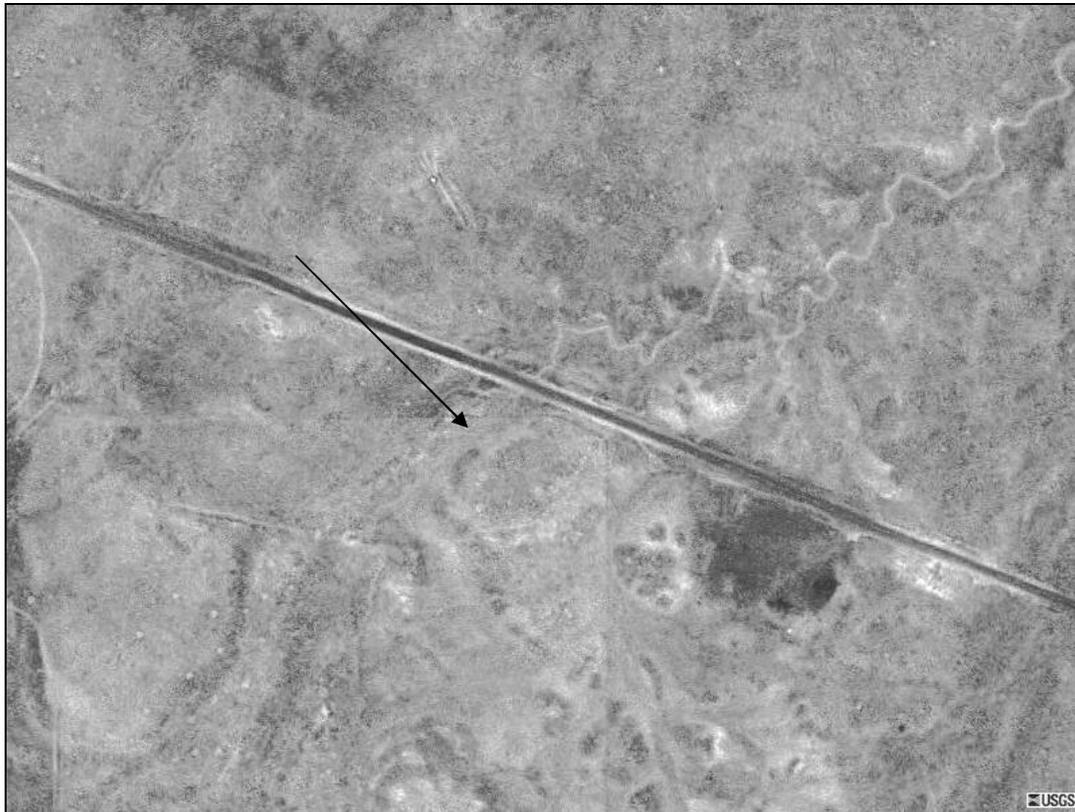
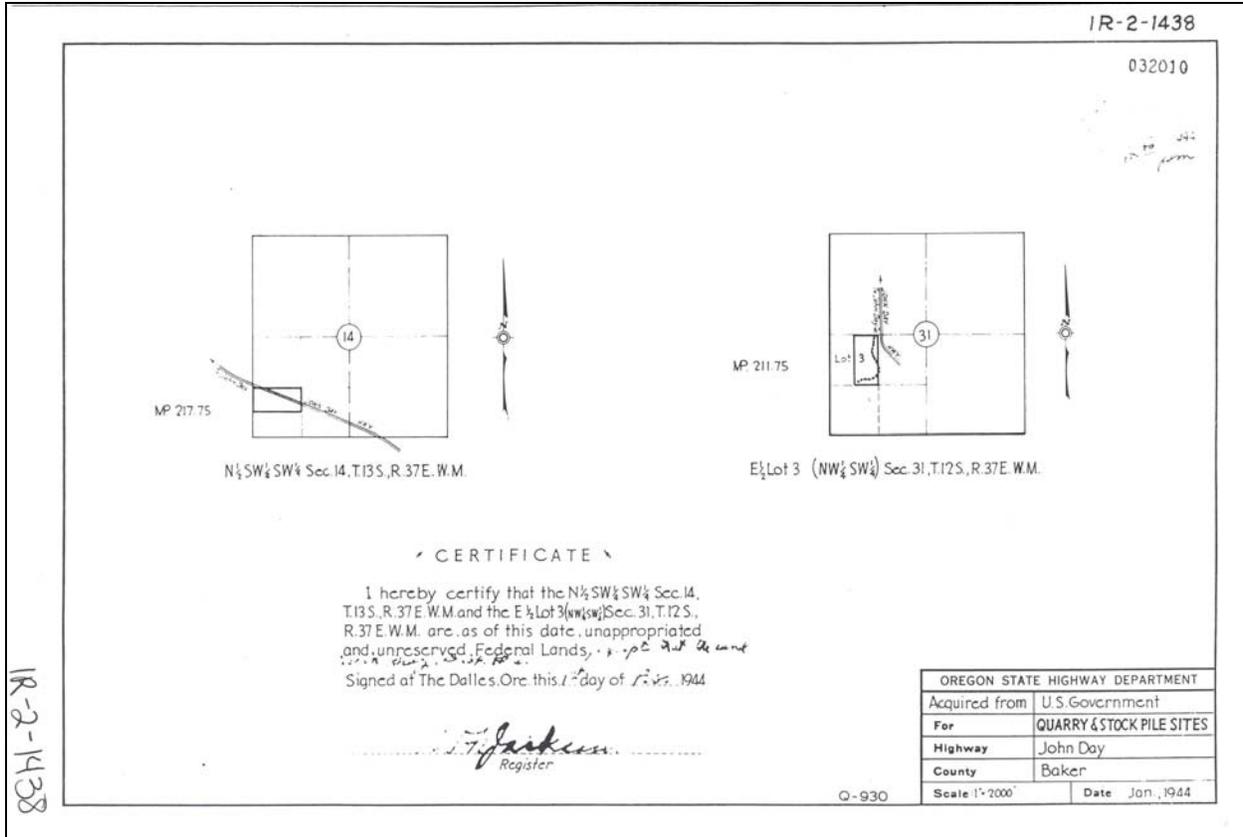


Aerial view of the cinder pit site located off of the county road.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Baker				14	0005	208.6	13S	37.0E	14
File ID		Source #	Date Visited	Map #			Type of Site		
11283		01-004-5	04/25/2001	1R-2-1438			Raw Land		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
44 26'00.50000"	118 09'07.99000"	1219	40	NA					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
Colluvium	Qf	NA		NA			Na		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Fair to Poor			NA	155					
Potentially Significant Site	Why			Open/Closed	Direction				
No	USA Ground			Closed	NA				
Adjacent Land Use									
Open Space									
Remarks									
Highway 26 bisects this site. This is raw land with a small stockpile site located here. The material is predominately soils with bedrock at an unknown depth. The terrain is fairly flat with no screening from the highway. USA (BLM) Owned									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									



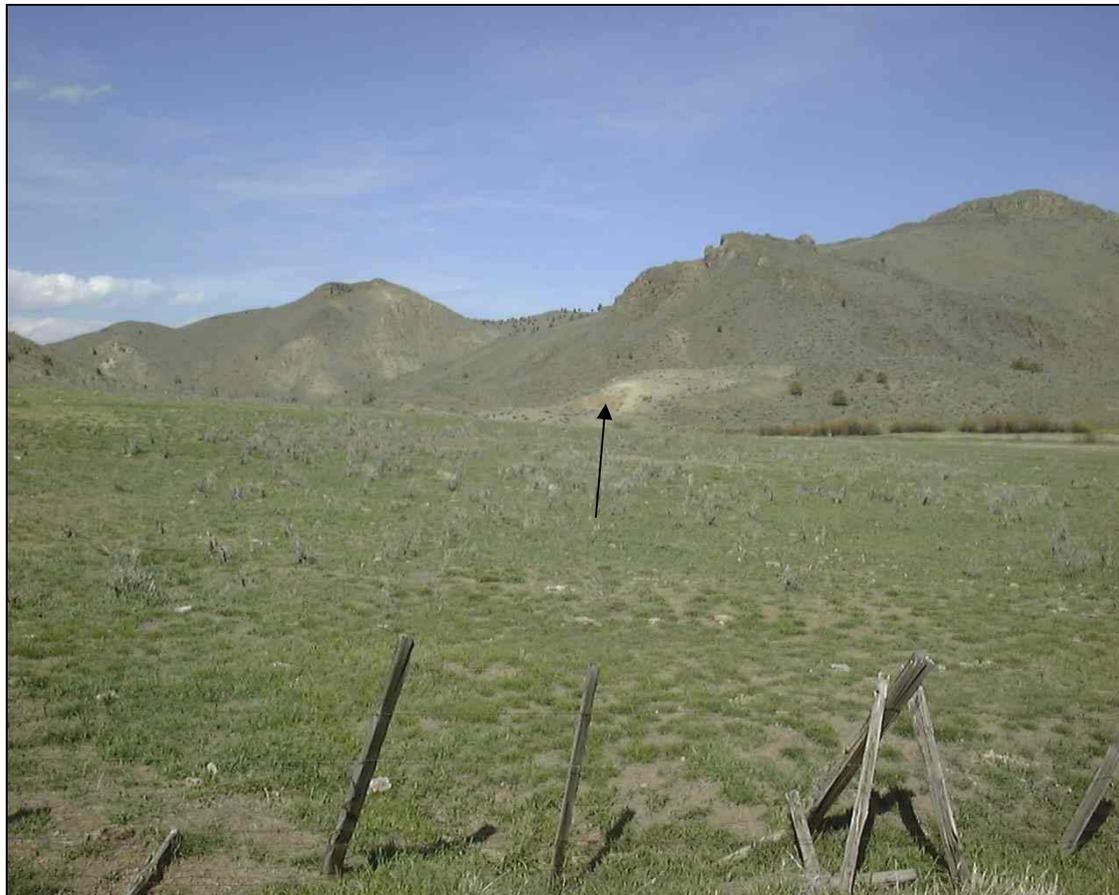
View of the raw land site bisected by Highway 26.



Aerial view of the raw land site located on either side of Highway 26.

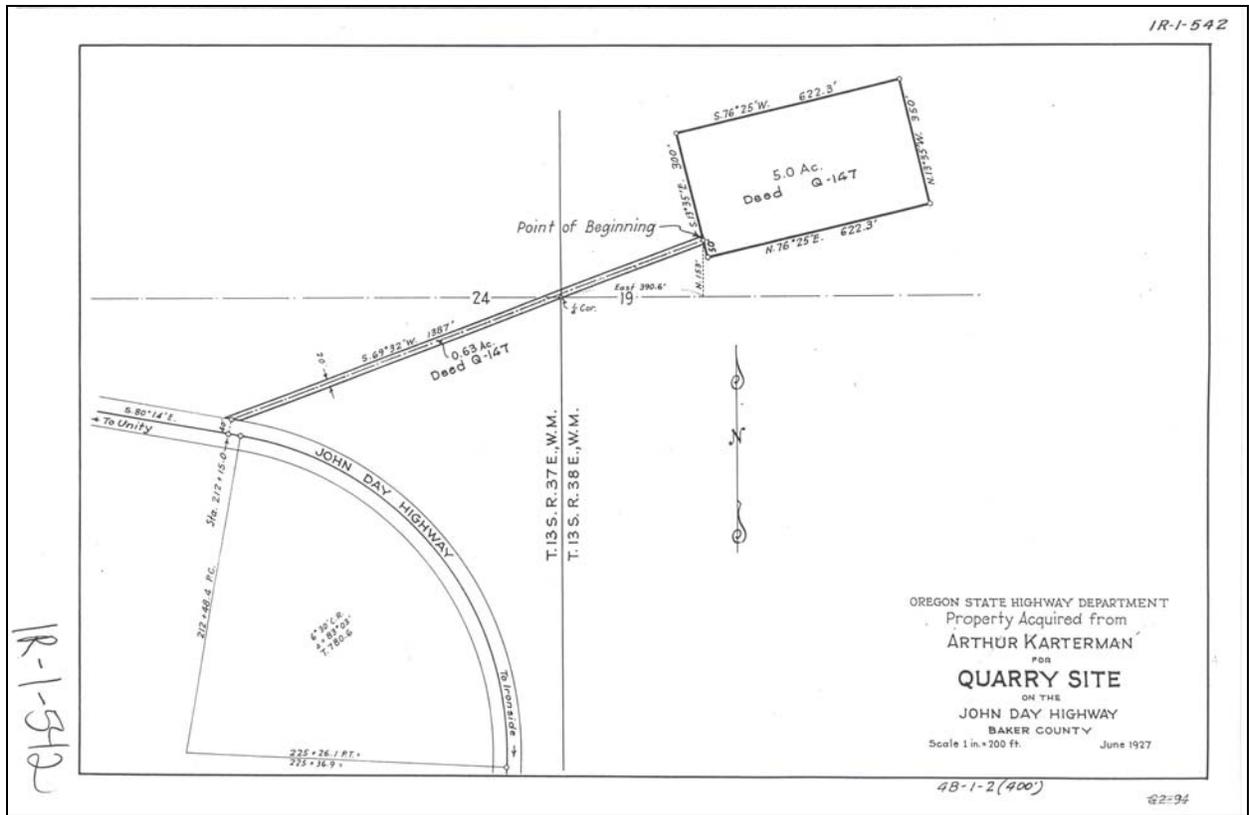
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Baker	Karterman Quarry				14	0005	216.58	13S	38.0E	19
File ID		Source #	Date Visited	Map #		Type of Site				
Q0147		01-005-5	04/25/2001	1R-1-542		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
44 25'24.98000"	118 06'38.47000"	1219	5.63	<1						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
Rhyolite	Ts	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Poor			NA	155						
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	NA					
Adjacent Land Use										
Open Space										
Remarks										
This site is northeast of Highway 26 approximately 350 meters. The gate was locked and access is restricted. The site is located within an area of rhyolite. There appears to be room to work with limited screening. The terrain is gradual where the site is located. There is a past disturbance less than one acre in size.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

NE



View from Highway 26 of the quarry.

01-005-5

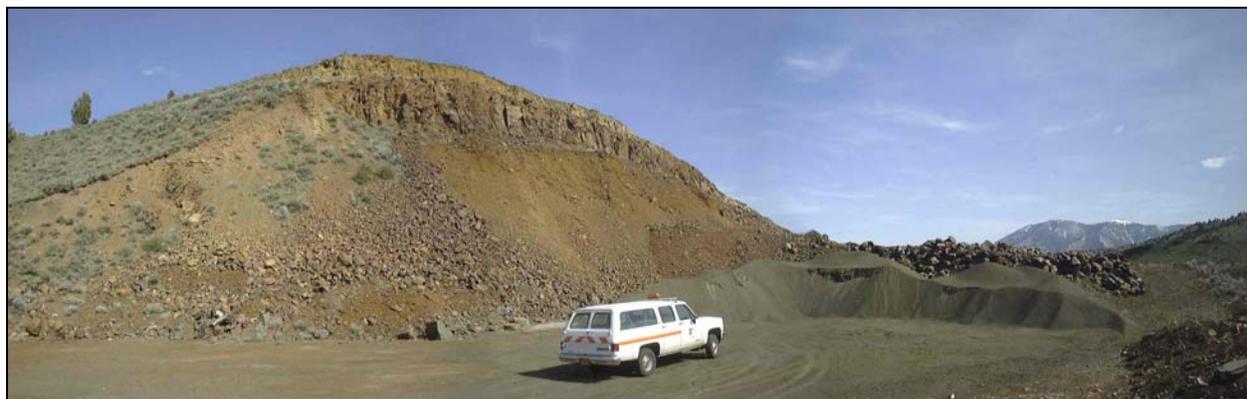


Aerial view of the quarry site located approximately 350 meters northeast of Highway 26.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Baker	Murray Quarry			14	0005	220.9	14S	37.0E	12
File ID		Source #	Date Visited	Map #			Type of Site		
Q0106, 11273		01-006-5	04/25/2001	1R-1-539			Stock Pile Site		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #				
44 21'43.09000"	118 06'45.04000"	1343	10.9	<6	01-0015				
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
Basalt	Tstv	Medium Grey (N5)		Slight			Moderately Fractured		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Good			R3+	155	35,000	73,238			
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			Closed	West across Highway 26 is Camp Creek				
Adjacent Land Use									
Open Space									
Remarks									
This site is adjacent to and east of Highway 26. Part of the ground is a stock pile site that is recorded at the assessors office. The other site is a quarry (not recorded) along the right of way. The rock is a fine-grain basalt. There is limited room to work, and no screening from the highway at this steep gourd. There is a large amount of rip rap stock piled here. You can rip the material, although not much remains. There is a minor amount of waste rock here. DOGAMI Permit # 01-0015.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
2.44	2.49	17.4	4.4	7.0			13.2	0.6	
Material Use									
AC Base (1986)									

E

S



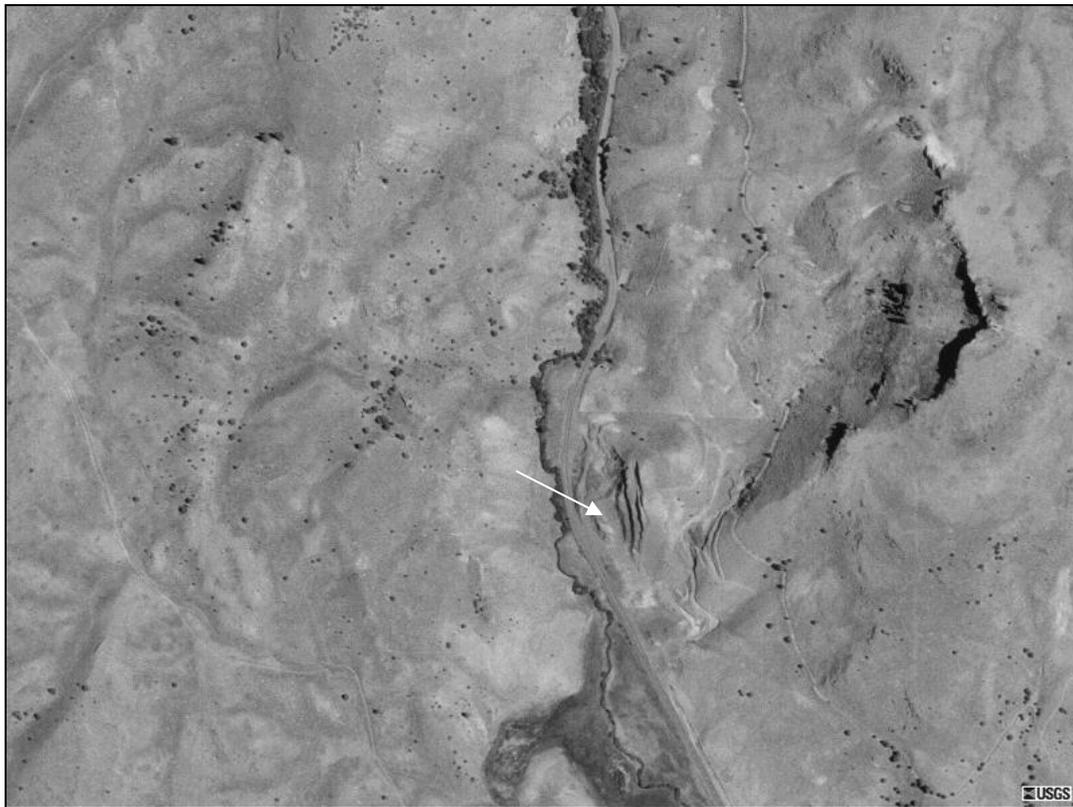
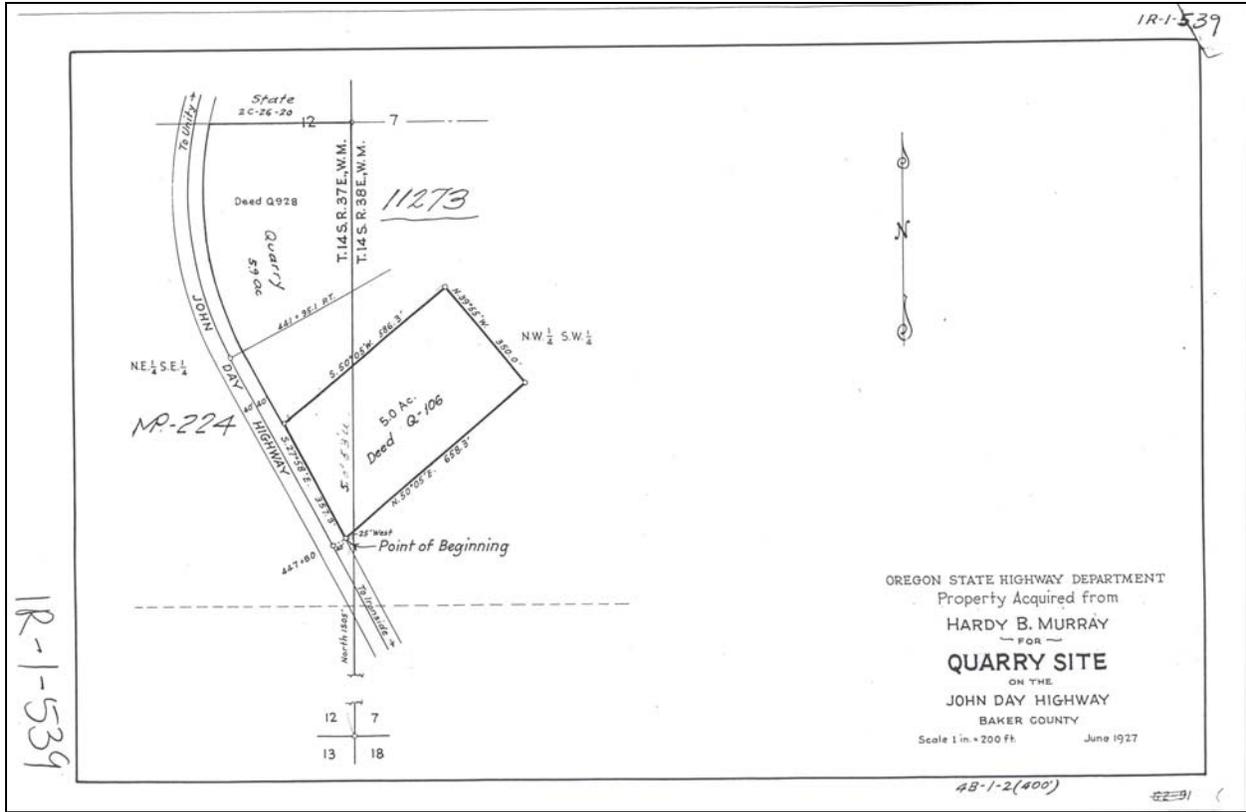
View of the quarry pit face.

N

E

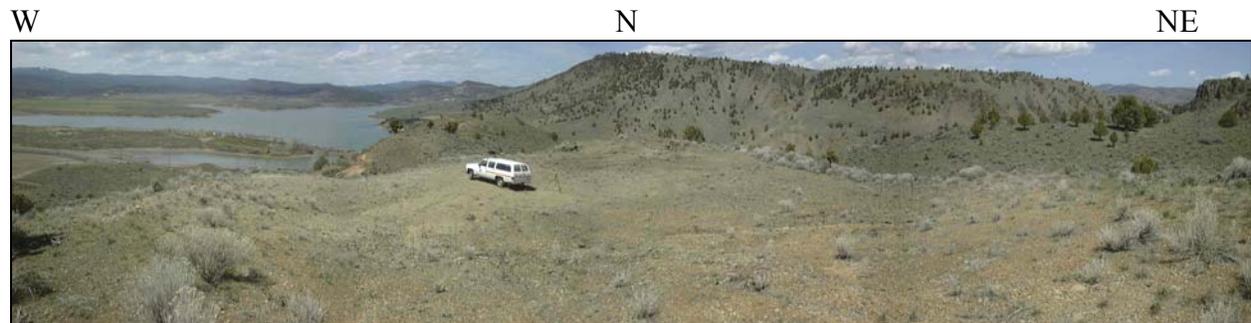


View of the stock pile sites adjacent to Highway 26.



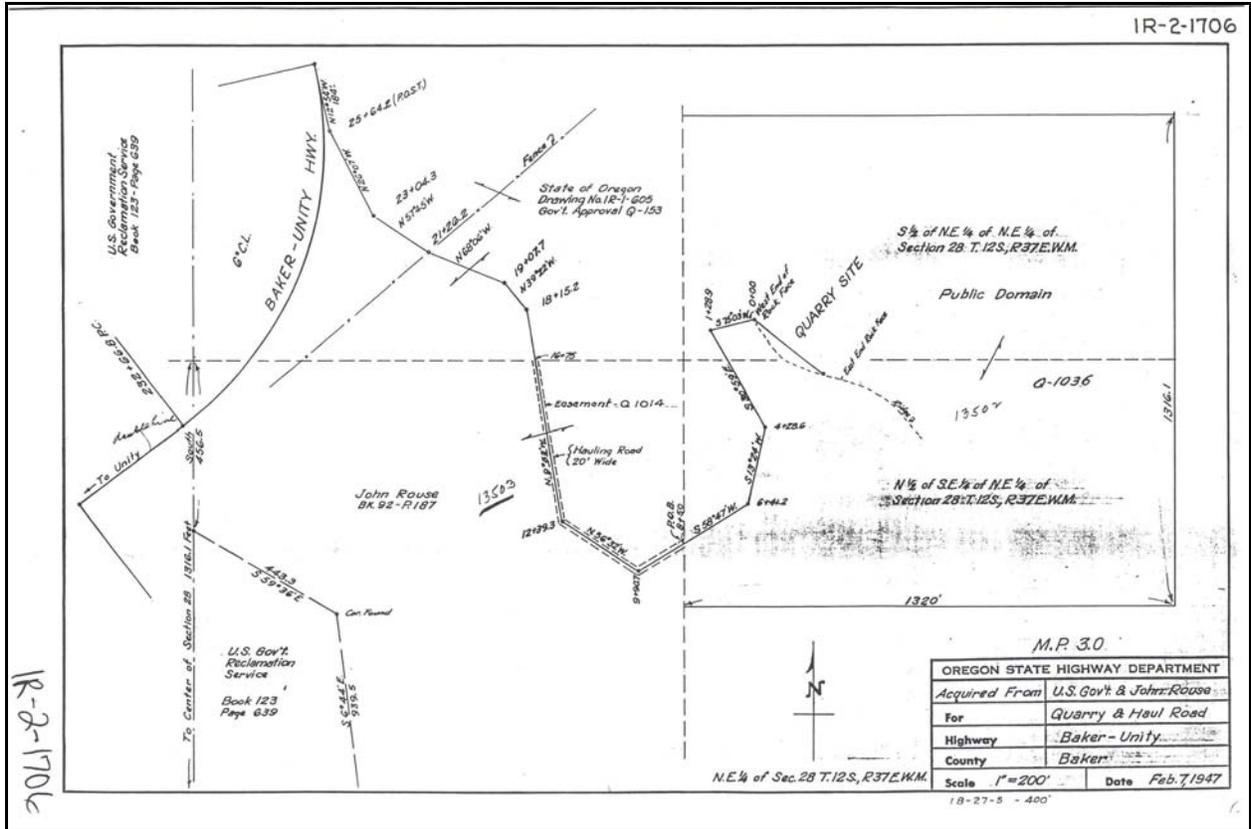
Aerial view of the quarry and stock pile site along Highway 26.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Baker	Unity Reservoir			14	0415	3	12S	37.0E	28
File ID		Source #	Date Visited	Map #			Type of Site		
Q0153, 13502		01-022-5	04/25/2001	1R-2-1707, 1R-2-1706, 1R-1-605			Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #				
44 29'53.20596"	118 10'31.82184"	1269.788	80	<2					
Comments									
GPS acquired in upper disturbance.									
Rock Type	Unit	Color		Weathering		Jointing			
Basalt	Tc	Medium Dark Grey (N4)		Slight to Fresh		Moderate to Massive			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Good			R4	184	50,000	75,000			
Potentially Significant Site	Why		Open/Closed	Direction					
No	Little Quantity		Closed	Adjacent northwest/northeast is the Burnt River and Untiy Reservoir					
Adjacent Land Use									
Open Space/ State Park									
Remarks									
This site is adjacent to and south of Highway 245. The rock here is a medium-grain, moderately fractured basalt. The terrain is moderately steep to steep (20-35 degrees). There is room to work with fair screening from the highway. You can rip the rock but should drill and blast. The work here is from the top down. At the base level, adjacent to the highway is a poor quality agglomerate.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
2.77	.85	16.1	4.1	1.8			21.4	0.5	
Material Use									
AC (1989)									



A panoramic view looking north.

Close-up view of the basalt in the quarry, note 4 lb. maul for scale.



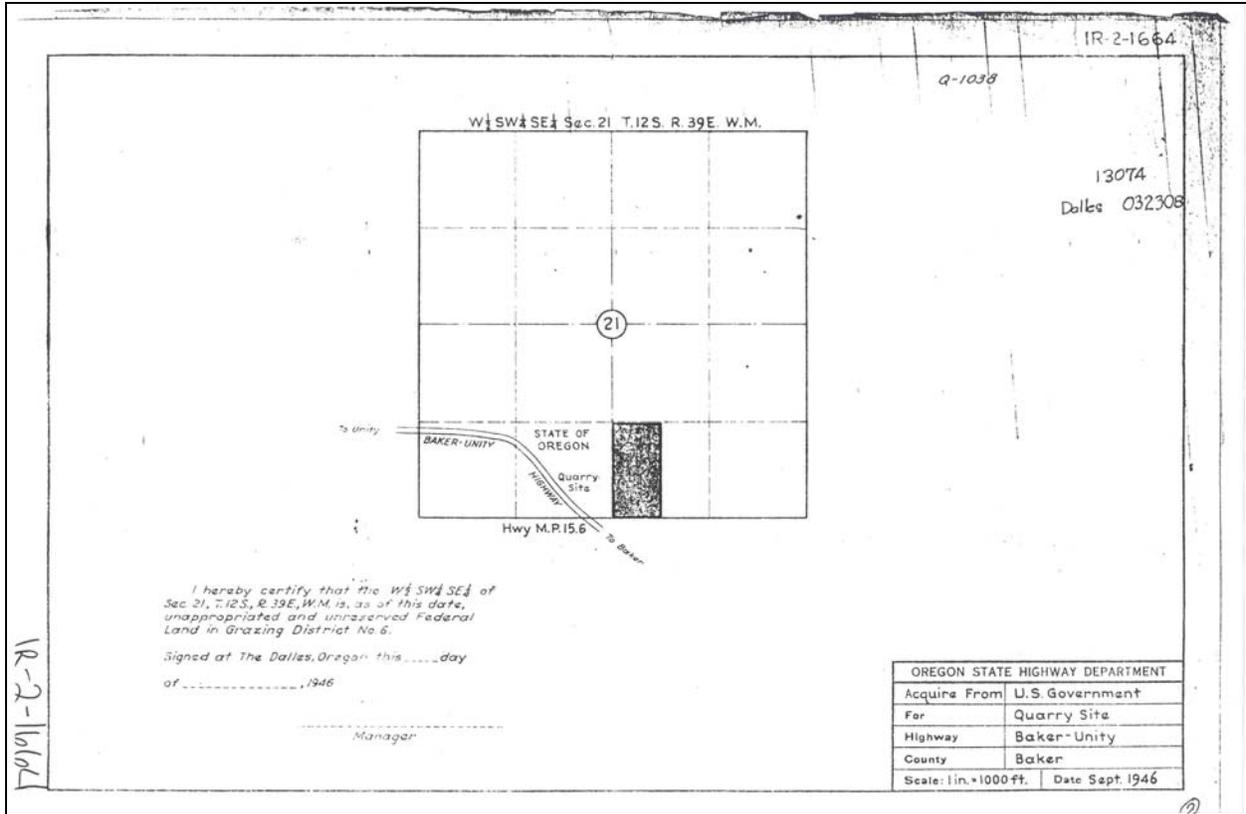
Aerial view of quarry looking north, Unity Reservoir is in the right side of the image.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Baker					14	0415	15.3	12S	39.0E	21
File ID		Source #	Date Visited	Map #			Type of Site			
13074		01-025-5	04/25/2001	1R-2-1664, 1R-2-1611			Raw Land			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
44 30'10.42000"	117 56'22.26000"	1162	20	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
Rhyolite	Ts	NA		Slight			Highly Fractured			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Poor			R2+	155	200,000	418,500				
Potentially Significant Site	Why			Open/Closed	Direction					
No	Wrong Lithology			Closed	NA					
Adjacent Land Use										
Open Space/ Ranching										
Remarks										
This site is located north of Highway 245. This is raw land with no visible disturbance. The material here is a rhyolite of limited use. The terrain is moderately steep (approximately 20 degrees) with no room to work and no screening from the highway. You could rip the material. Leased ground from USA. Tax lot 1500 and 2000.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

E



View of the raw land site looking across Highway 245.



Aerial view of the raw land site located north of Highway 245.

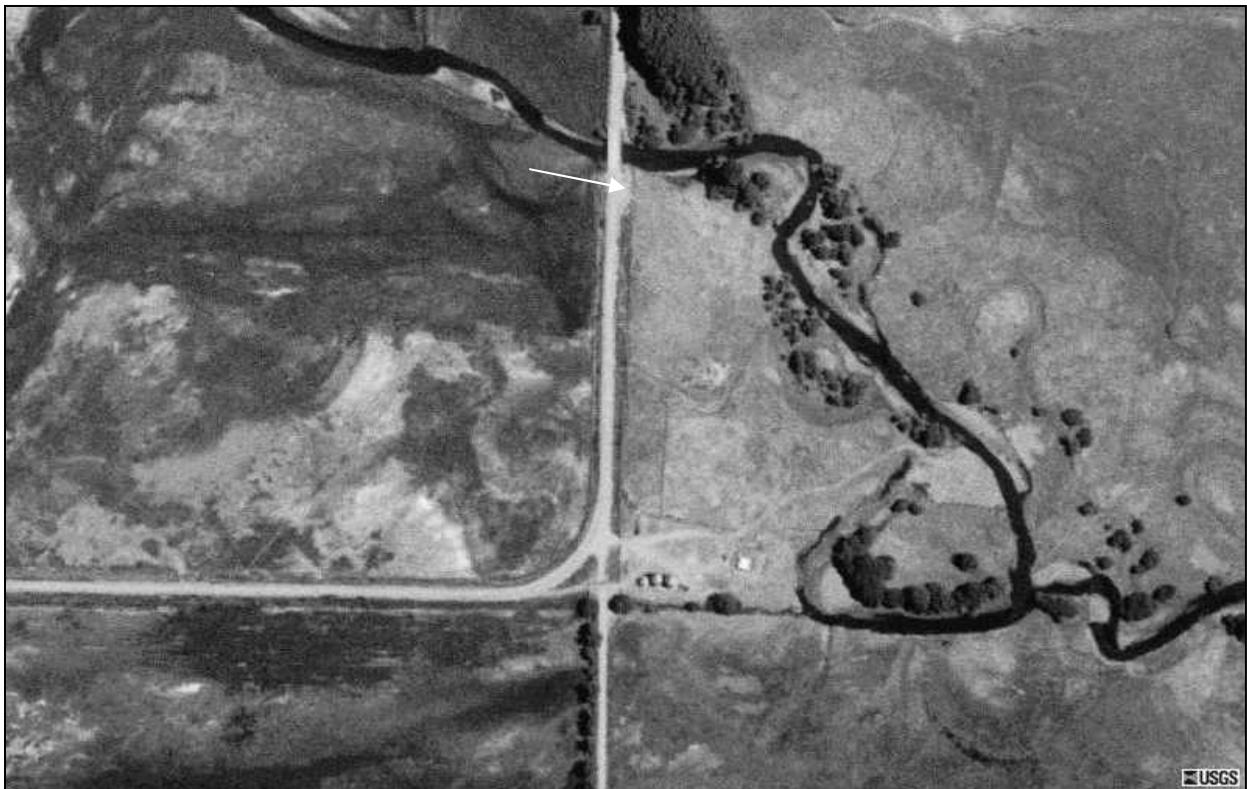
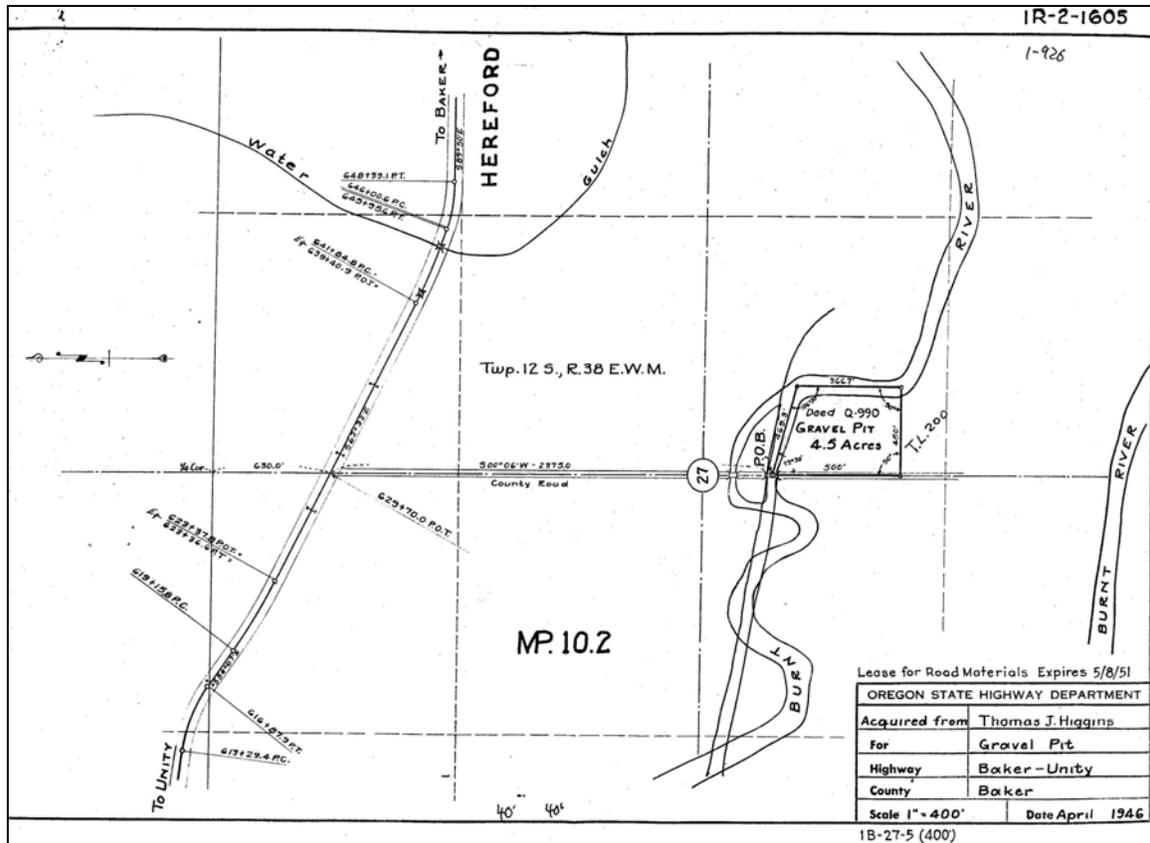
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Baker	Hereford				14	0415	7.1	12S	38.0E	27
File ID		Source #	Date Visited	Map #			Type of Site			
12720		01-052-5	04/25/2001	1R-2-1605			Gravel			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
44 29'36.13000"	118 02'28.88000"	1113	4.5	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	155	14,000	29,295				
Potentially Significant Site	Why			Open/Closed	Direction					
No	Too small			Closed	Adjacent to the Burnt River					
Adjacent Land Use										
Ranching										
Remarks										
This site is located south of Hereford, Oregon approximately 750 meters and is adjacent to the Burnt River. The material is composed of small cobble size and less gravel (40%), and sand (60%). The ground is about 3 feet above the river and just below the county road. The assessors office has ODOT as the owners, but the ground is posted No Trespassing. The adjacent rancher is using this site.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

NE

S



Panoramic view of the site looking east from the county road.



Aerial view of site along the county road, south of Hereford, OR.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Baker					14	0449	9.5	14S	45.0E	33
File ID		Source #	Date Visited	Map #		Type of Site				
Q0290, 26588		01-071-5	04/18/2001	1R-1-1166, 1R-5-1030		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
44 18'41.94000"	117 12'57.20000"	669	32.04	<2						
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)				
Fair			NA	155	40,000	60,000				
Potentially Significant Site	Why				Open/Closed	Direction				
No	Close to the highway with acreage, but the quantity does not meet the classification of aggregate sites for Goal 5.				Closed	South approximately 100 meters is the Snake River.				
Adjacent Land Use										
Open Space/ State Park approximately 400 meters to the west.										
Remarks										
This site is east of Highway 30 approximately 700 meters. The easement is gated and locked by the adjacent Rancher.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



Long shot view of the quarry site located 700 meters east of Highway 30.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Baker					14	0449	3.41	14S	44.0E	11, 12
File ID		Source #	Date Visited	Map #		Type of Site				
Q0340		01-074-5	04/18/2001	1R-1-1278		Raw Land				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
44 22'24.23000"	117 17'37.24000"	670	40	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering		Jointing				
Basalt	Tc	Medium Dark Grey (N4)		Fresh to Slight		Highly Fractured				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good			R3+	167	600,000	1,352,700				
Potentially Significant Site	Why	Open/Closed	Direction							
No	USA Ground.	Closed	To the east approximately 200 meters is the Burnt River.							
Adjacent Land Use										
Open Space										
Remarks										
This site is adjacent to and west of Highway 30. The rock here is a fine-grain, highly fractured basalt. There is no past disturbance. There is a sanding shed and stockpile at this location. There is no room to work and no screening from the highway. All work should be from the top down. There could be some overburden. USA ground.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

SE

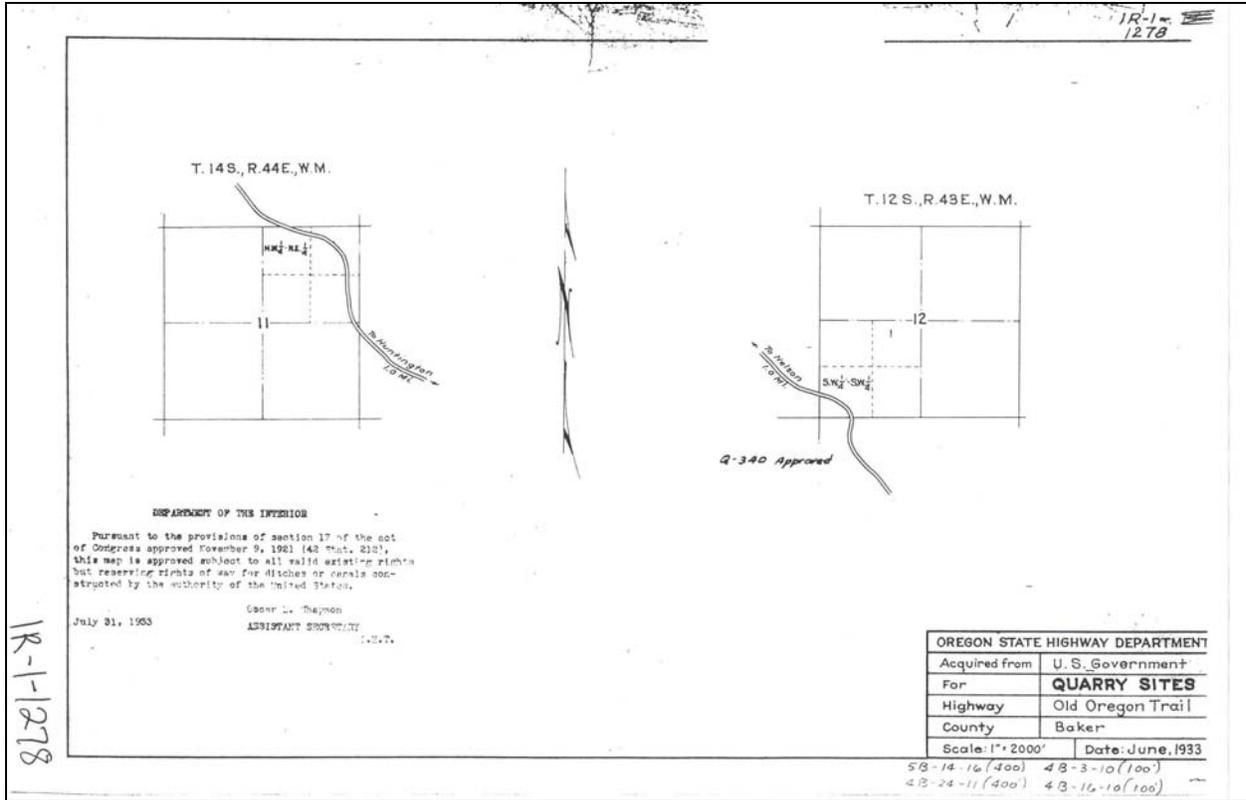
SW



View of the sanding shed and stock pile site looking south across Highway 30.



Close-up view of the fracture pattern.



Aerial view of the stock pile site and the sanding shed.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Baker				14	0006	0	13S	44.0E	15
File ID		Source #	Date Visited	Map #			Type of Site		
Q0352		01-905-5	04/18/2001	1R-1-1306			Raw Land		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
44 26'21.32000"	117 19'32.81000"	731	6.47	NA					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
NA	Qal	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
NA			NA	155					
Potentially Significant Site	Why			Open/Closed	Direction				
No	No access/Too small			Closed	Adjacent to the Burnt River.				
Adjacent Land Use									
Open space									
Remarks									
This ground is located on the west side of the Burnt River and has no access to it anymore. The material is composed of igneous and metamorphic gravel from the surrounding area. The property is approximately four feet above the water level.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

S

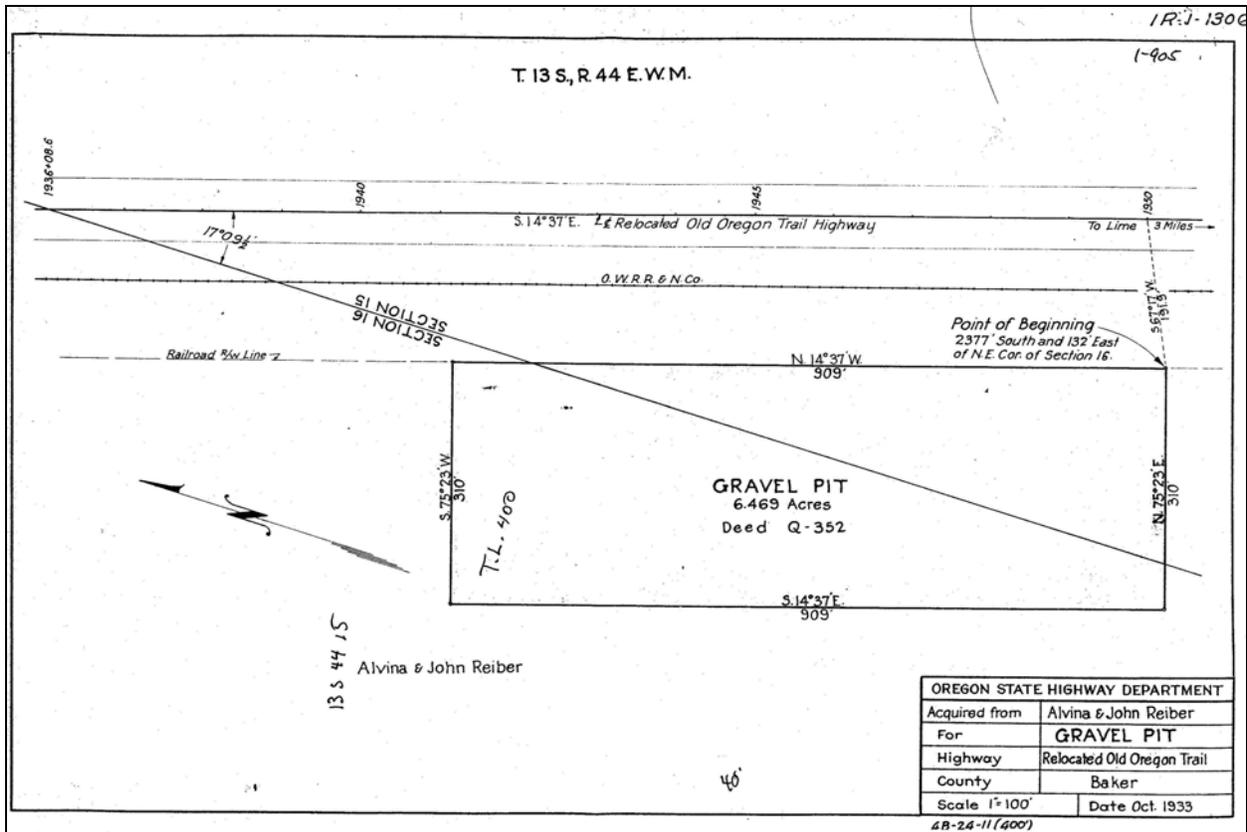
NW



View looking west across the Burnt River at the raw land site.



Close-up view of the material at this site.

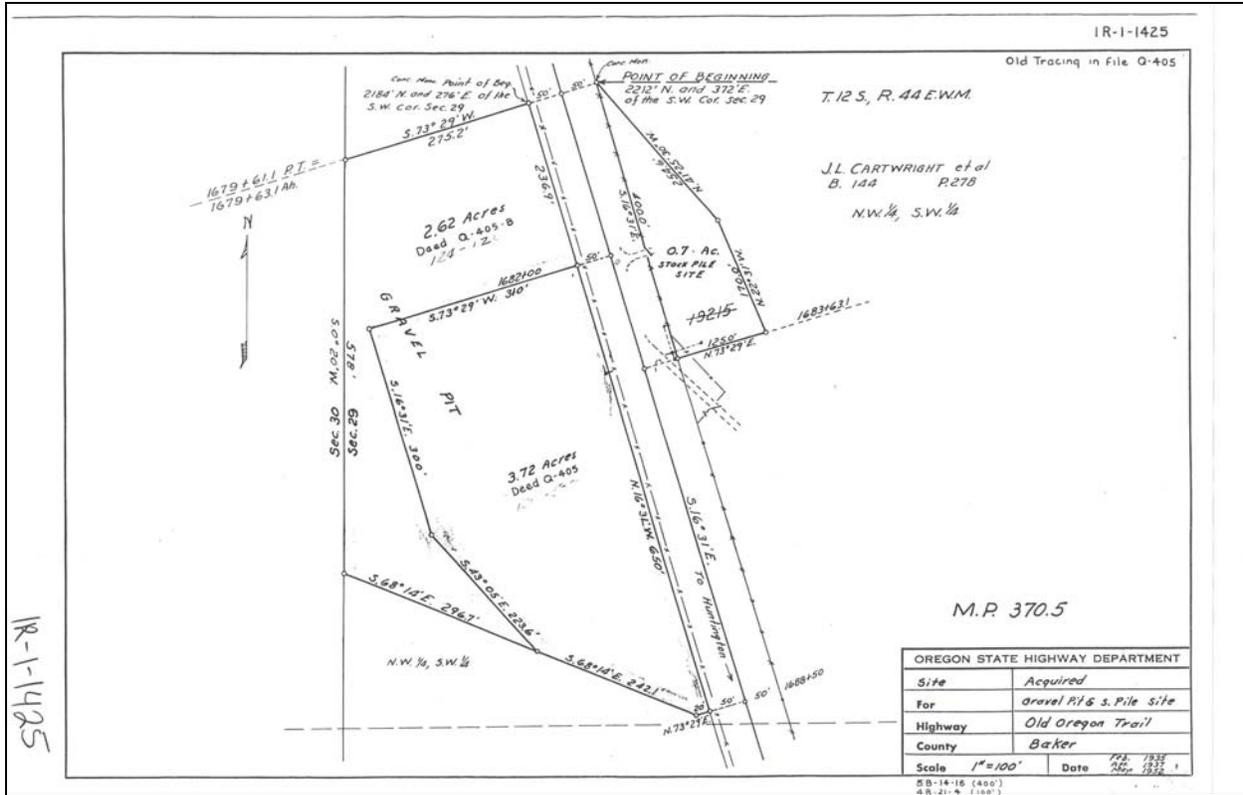


Aerial view of the raw land site located west of the Burnt River.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Baker				14	0006	0	12S	44.0E	29
File ID		Source #	Date Visited	Map #			Type of Site		
01895, 04613		01-907-5	04/18/2001	1R-1-1425			Raw Land		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
44 29'38.19000"	117 21'57.64000"	731	6.34	NA					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
NA	Qal	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Fair			NA	155					
Potentially Significant Site	Why			Open/Closed	Direction				
NA	NA			NA	NA				
Adjacent Land Use									
NA									
Remarks									
The site was consumed by I-84.									
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 consumed by I-84.



Aerial view of the raw land site that was consumed by I-84.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Baker				14	0006	0	13S	44.0E	04
File ID		Source #	Date Visited	Map #			Type of Site		
Q0510		01-908-5	04/18/2001	1R-1-1658			Raw Land		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
44 27'43.14000"	117 19'55.11000"	731	4.37	NA					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type		Unit	Color		Weathering		Jointing		
NA		JTrsv	NA		NA		NA		
Quality			Hardness	lbs./cu ft.		Reserve (cy)		Reserve (Tons)	
NA			NA	155					
Potentially Significant Site	Why			Open/Closed		Direction			
NA	NA			NA		NA			
Adjacent Land Use									
NA									
Remarks									
No access to this site anymore. I-84 has moved and Highway 30 is gone.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

NW

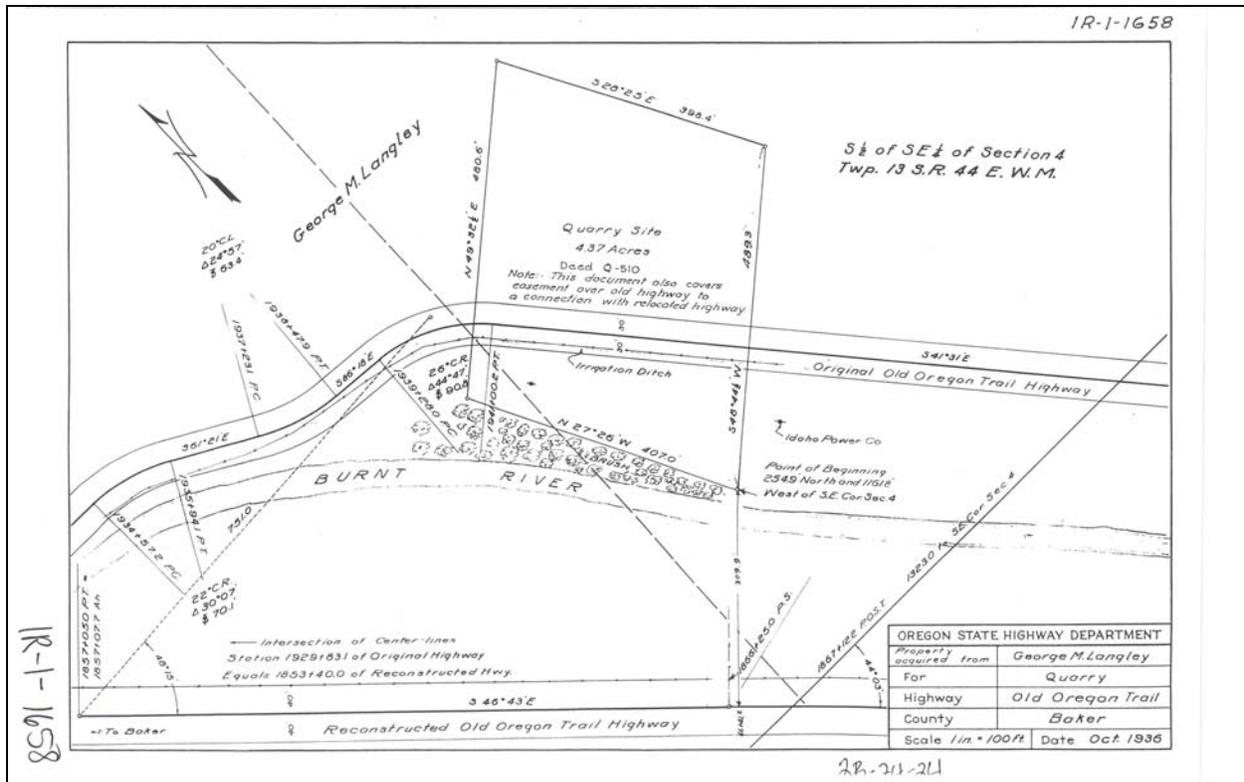
E



View of the raw land site.



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



Aerial view of the raw land site located east of I-84 and the Burnt River.

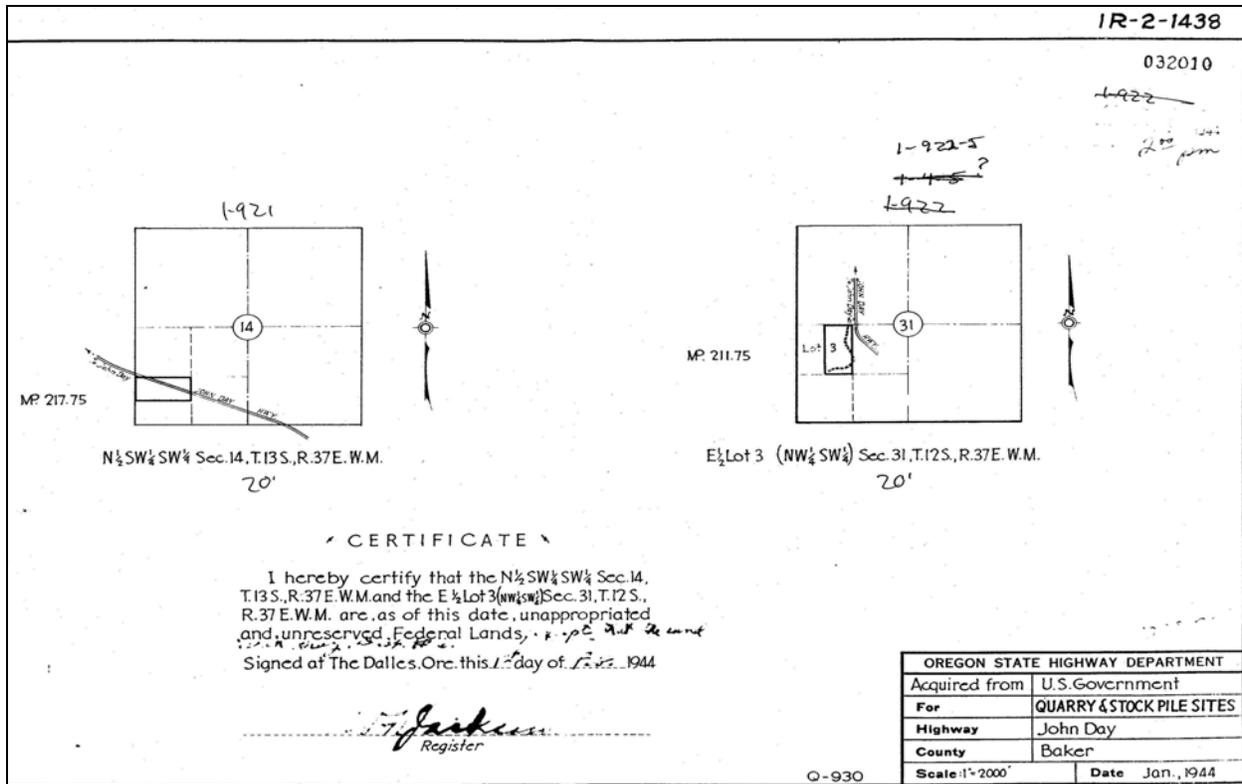
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Baker					14	0005	0	12S	37.0E	31
File ID		Source #	Date Visited	Map #		Type of Site				
11283		01-922-5	04/25/2001	1R-2-1438		Raw Land				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
44 28'41.36000"	118 13'39.63000"	1219	20	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
Volcanic	Ts	NA		Slight			Highly Fractured			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair			R2 to R3	155						
Potentially Significant Site	Why			Open/Closed	Direction					
No	USA Owned			Closed	NA					
Adjacent Land Use										
Open Space										
Remarks										
This site is west of Highway 26 about 200 meters. The rock here is predominantly a rhyolite of fair to poor quality and a thin basalt flow sitting on top. There is no room to work and no screening from the road. The terrain is gradual (7 degrees). You can rip the material. The site is bisected by Cemetery County Road. USA Owned.										
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 west of Highway 26 on Cemetery County Road.



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



Aerial view of the site on either side of Cemetery County Road.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Baker				14	0005	0	12S	36.0E	16
File ID		Source #	Date Visited	Map #			Type of Site		
16688, 06487		01-934-5	04/25/2001	1R-2-761			Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
44 31'35.77215"	118 18'38.66362"	1366.548	6.5	<4					
Comments									
GPS acquired in the pit.									
Rock Type	Unit	Color		Weathering			Jointing		
Basaltic Andesite	Tstv	Medium Light Grey (N6)		Fresh			Highly Fractured		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Fair to Good			R3	155	80,000	167,400			
Potentially Significant Site	Why			Open/Closed	Direction				
No	USA Ground			Closed	NA				
Adjacent Land Use									
Open Space									
Remarks									
This site is adjacent to and south of Highway 26. The rock here is a fine-grain, very platy basalt. There is room to work with good screening from the highway. There appears to be a larger area disturbed than the 1R map shows. The terrain is flat with the pit elevation about 8 feet above the highway. You can rip the material, but will acquire a large amount of very small pieces due to the platy nature of the basalt. Large amount of rip rap.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

SE

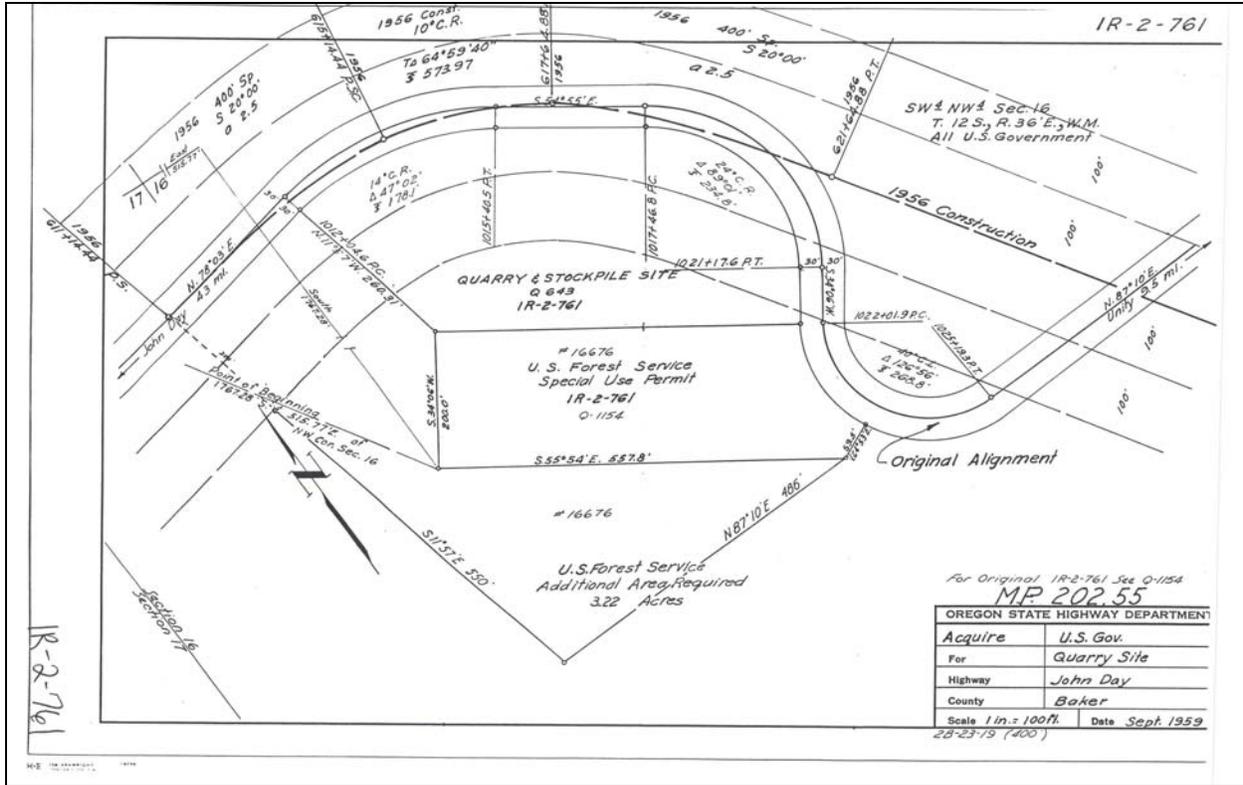
NE



View of the quarry site adjacent to and south of Highway 26.



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



Aerial view of the quarry site that is adjacent to Highway 26.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Baker					14	0415	10.29	12S	39.0E	27
File ID		Source #	Date Visited	Map #			Type of Site			
12725		01-940-5	04/25/2001	1B-27-5, 1R-2-1606			Borrow			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
44 29'43.49548"	117 54'48.43955"	1095.27	40	NA						
Comments										
GPS acquired in the pit.										
Rock Type		Unit	Color	Weathering			Jointing			
Igneous/Metamorphic Gravel		Qal	NA	NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good			Na	155	400,000	837,000				
Potentially Significant Site	Why			Open/Closed	Direction					
No	USA Owned			Closed	Pine Creek (dry) bisects the ground					
Adjacent Land Use										
Open Space/ Ranching										
Remarks										
This site is located adjacent to and north of Highway 245. This is a borrow site that occupies Pine Creek Canyon. The material is composed of large boulders to silt size particles. There could be up to 45% gravel to 55% sand/silt. The site has some stock ponds for livestock in the area. Overburden on the sides of the hills could be up to 10 feet deep. At depth is basalt of unknown quality. USA ground.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

SW

NW

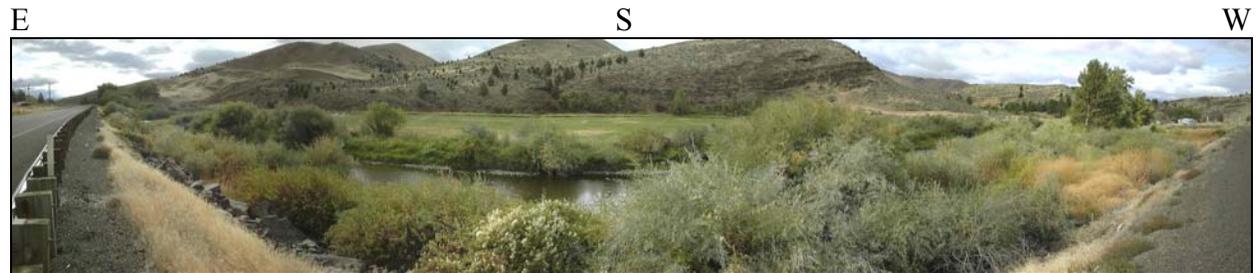


View of the borrow site.

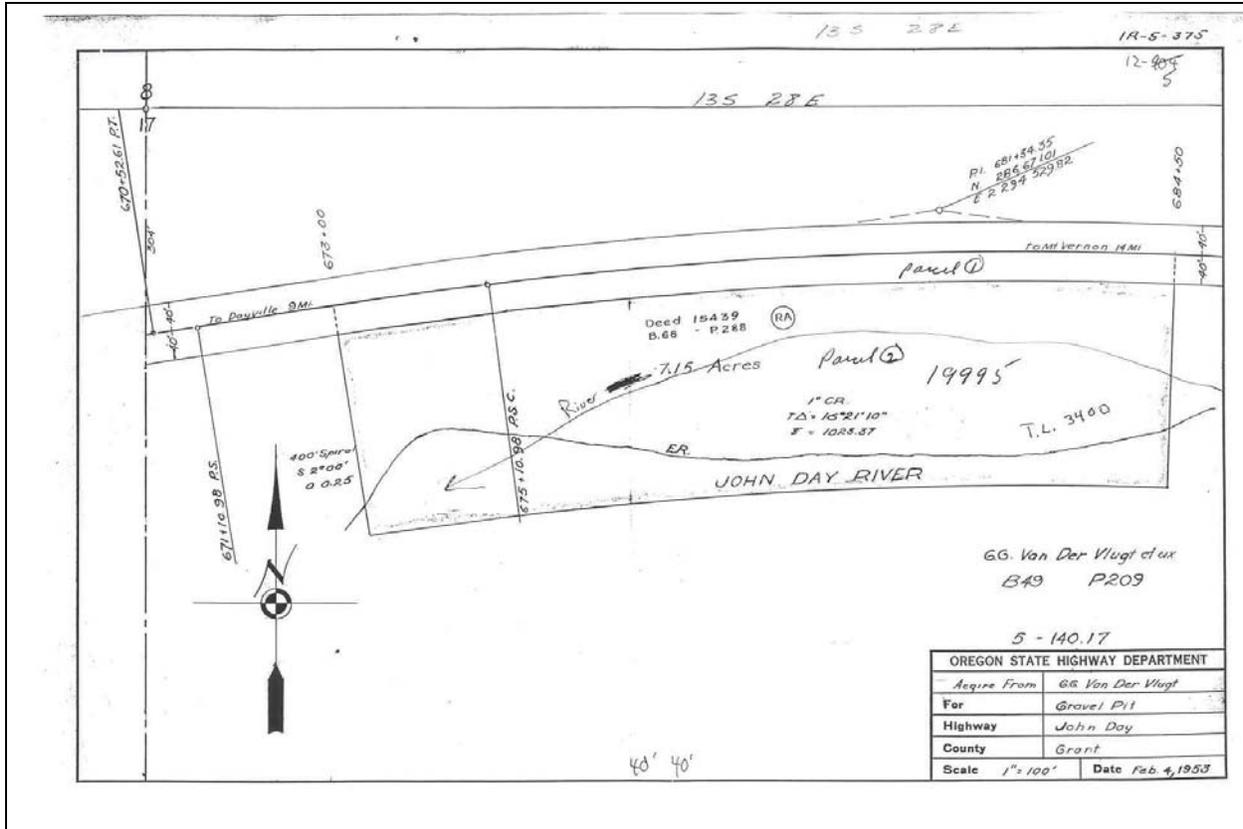


Close-up view of the material at the site.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Grant				14	0005	140.1	13S	28.0E	17
File ID		Source #	Date Visited	Map #			Type of Site		
19995		12-005-5	09/19/2000	1R-5-375			Gravel		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
44 26'49.59000"	119 23'00.26000"	792	7.15	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)		
Good			NA	120	5,000		8,100		
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			Closed	John Day River bisects the ground.				
Adjacent Land Use									
Farming/Ranching									
Remarks									
This site is adjacent to and south of Highway 26. The roadway is about 8 feet above the surrounding ground and the ground is about 3 feet above the river. This is a long and narrow piece of ground. Possible mitigation site. No access to the site. This site is important to protect the embankment along the highway.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

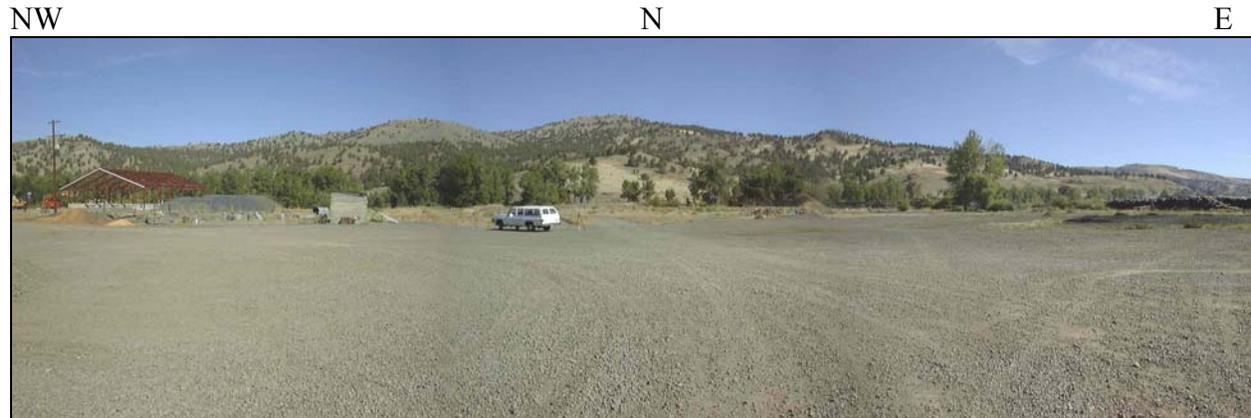


View of the site from Highway 26 looking south across the John Day River.

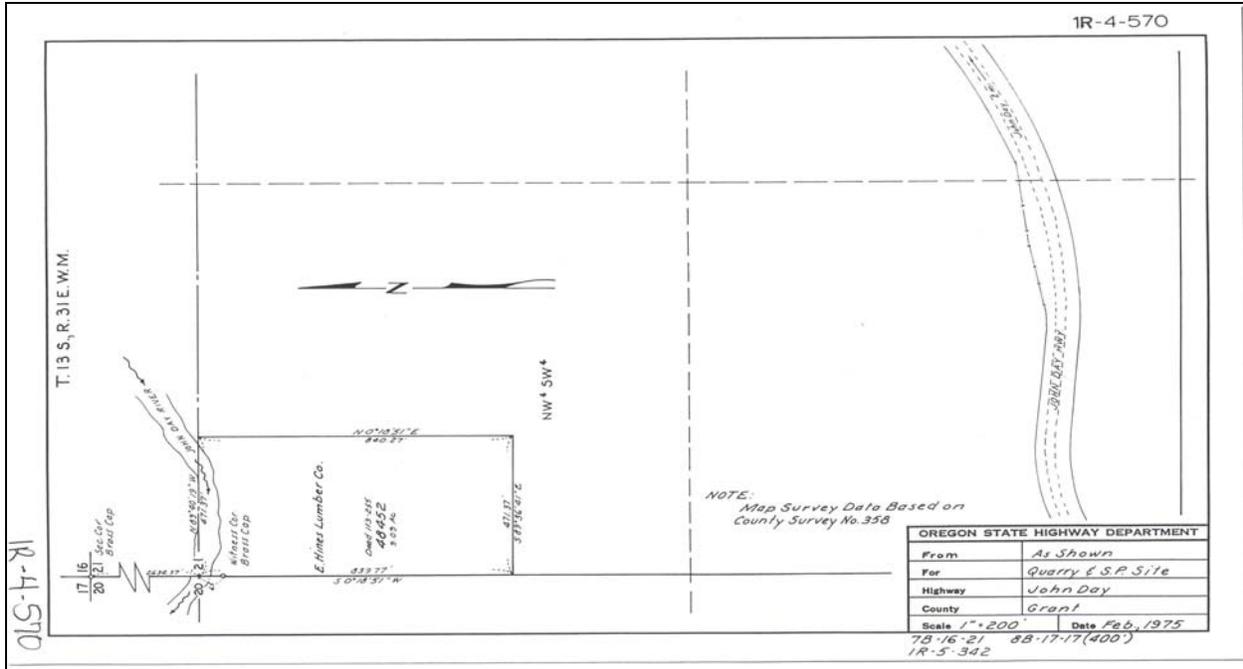


Aerial view of the site along the John Day River and Highway 26.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Grant				14	0005	160.2	13S	31.0E	21
File ID		Source #	Date Visited	Map #			Type of Site		
48452		12-008-5	09/13/2000	1R-4-570			Stock Pile Site		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
44 25'22.94249"	119 00'03.37369"	915.65	9.09	NA					
Comments									
GPS acquired on site.									
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	Adjacent to the John Day River.				
Adjacent Land Use									
Industrial									
Remarks									
This site is north of Highway 26 and west of the town of John Day. This is used as a waste site by Maintenance. The ground sits about 8 feet above the river in an industrial park.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
2.76	2.81	17.3	2.9	1.6			15.9	0.5	
Material Use									
(1976)									



View of the stock pile site adjacent to the John Day River.



Aerial view of the stock pile site adjacent to the John Day River.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Grant	Austin Quarry				14	0005	190.7	11S	35.0E	27
File ID		Source #	Date Visited	Map #		Type of Site				
27544, 18582		12-012-5	08/15/2001	1R-5-196		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
44 34'58.98584"	118 29'19.80852"	1359.975	20	<8						
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color		Weathering			Jointing			
Basalt	Tstv	Medium Dark Grey (N4)		Fresh			Highly Fractured			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Very Good			R3+	168	50,000	75,000				
Potentially Significant Site	Why	Open/Closed		Direction						
No	USA Ground	Closed		Clear Creek to the west approximately 700 meters						
Adjacent Land Use										
Open Space										
Remarks										
This site is located north of Highway 26 about 900 meters. The rock here is a fine-grain, highly fractured basalt, of very good quality. The terrain is gradual with room to work and good screening. The large pit has been reclaimed and Region 5 geology informs that there is not much aggregate left. The old access is blocked and the new access is from Highway 26 just east of the State Maintenance Yard. 300,000 cubic yards have been removed.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.64	2.7	17.2	1.5	1.8			21.8	0.4		
Material Use										
Base AC (1989)										

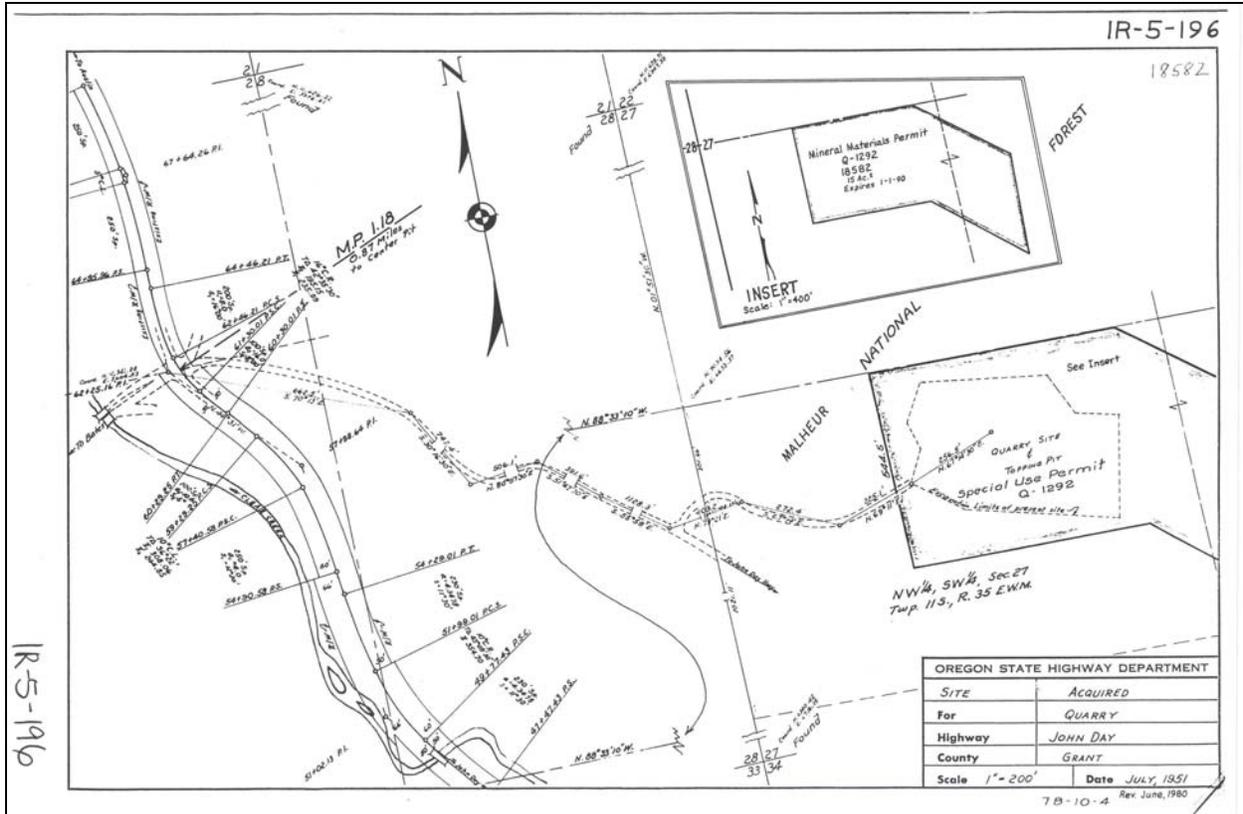
SW N SE



View of the site looking north.

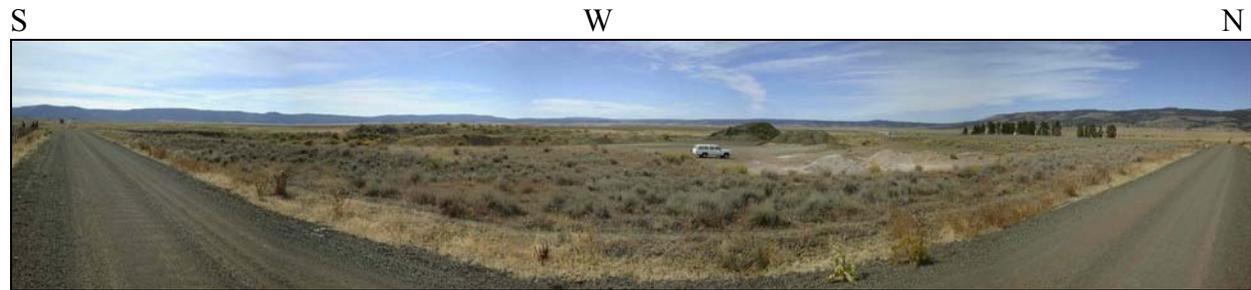


Close-up view of the basalt at this location with the hammer for scale.

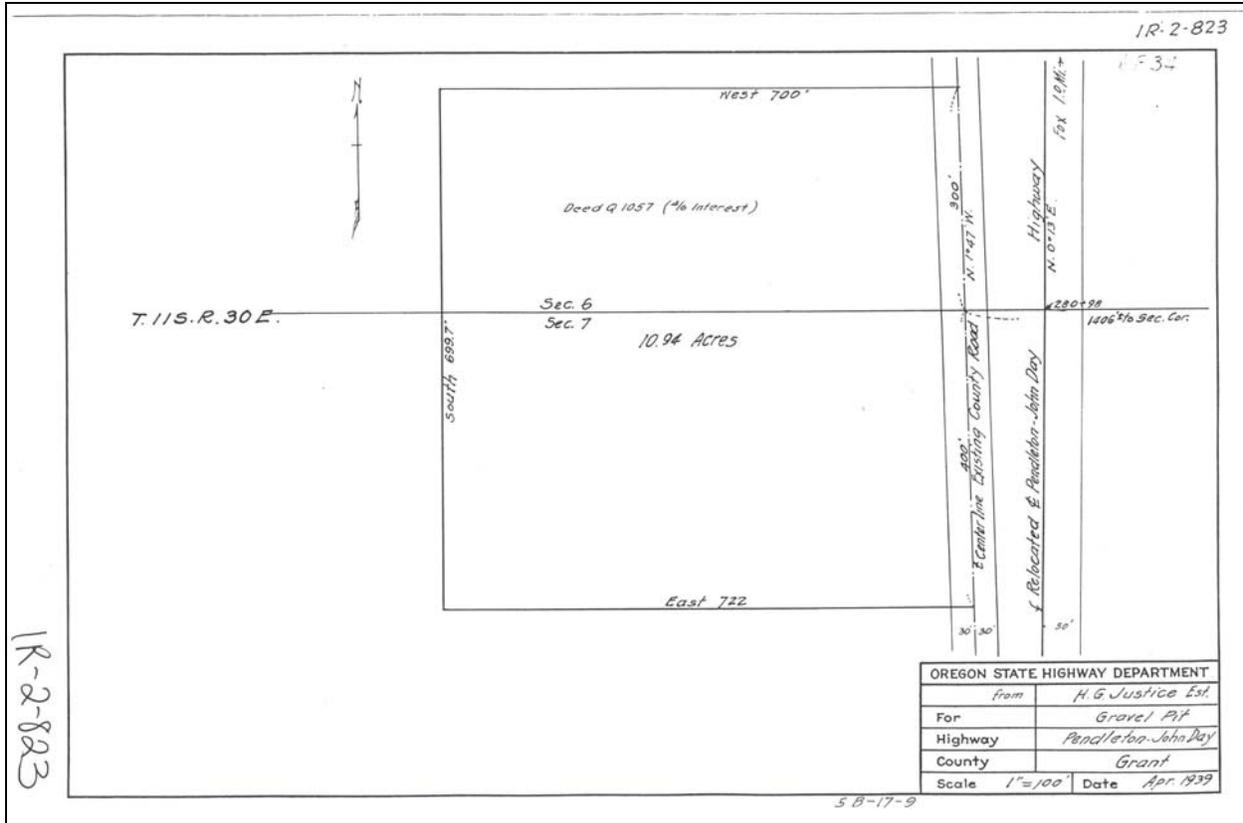


Aerial view of the site, Highway 26 is to the south and east.

County	Site Name	Dist	Hwy	Mile Pt	TWP	RGE	Sect
Grant		14	0028	99.5	11S	30.0E	06, 07
File ID		Source #	Date Visited	Map #		Type of Site	
06834		12-018-5	09/13/2000	1R-2-823		Borrow	
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #		
44 38'02.15217"	119 08'58.52235"	1340.634	11.42	<5			
Comments							
GPS acquired in the pit.							
Rock Type	Unit	Color	Weathering		Jointing		
Volcanic Colluvium	Qt	NA	NA		NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)	
Fair to Poor			NA	120	100,000	150,000	
Potentially Significant Site	Why			Open/Closed	Direction		
No	NA			Closed	NA		
Adjacent Land Use							
Open space							
Remarks							
This site is west of Highway 395 off of Cemetery Road. There is a small pit that is being filled in by Maintenance. The overburden could be up to 10 or more feet thick. There is no screening with room to work. This is flat ground.							
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C
Material Use							

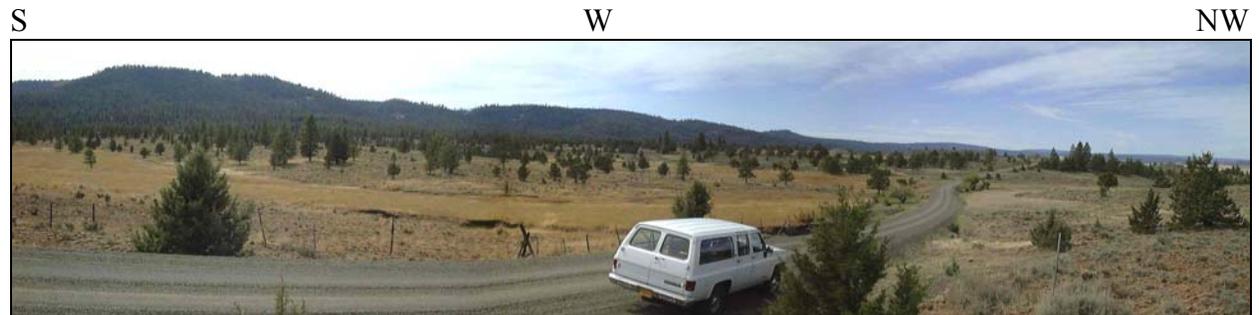


View of the borrow site looking west from the County Road.

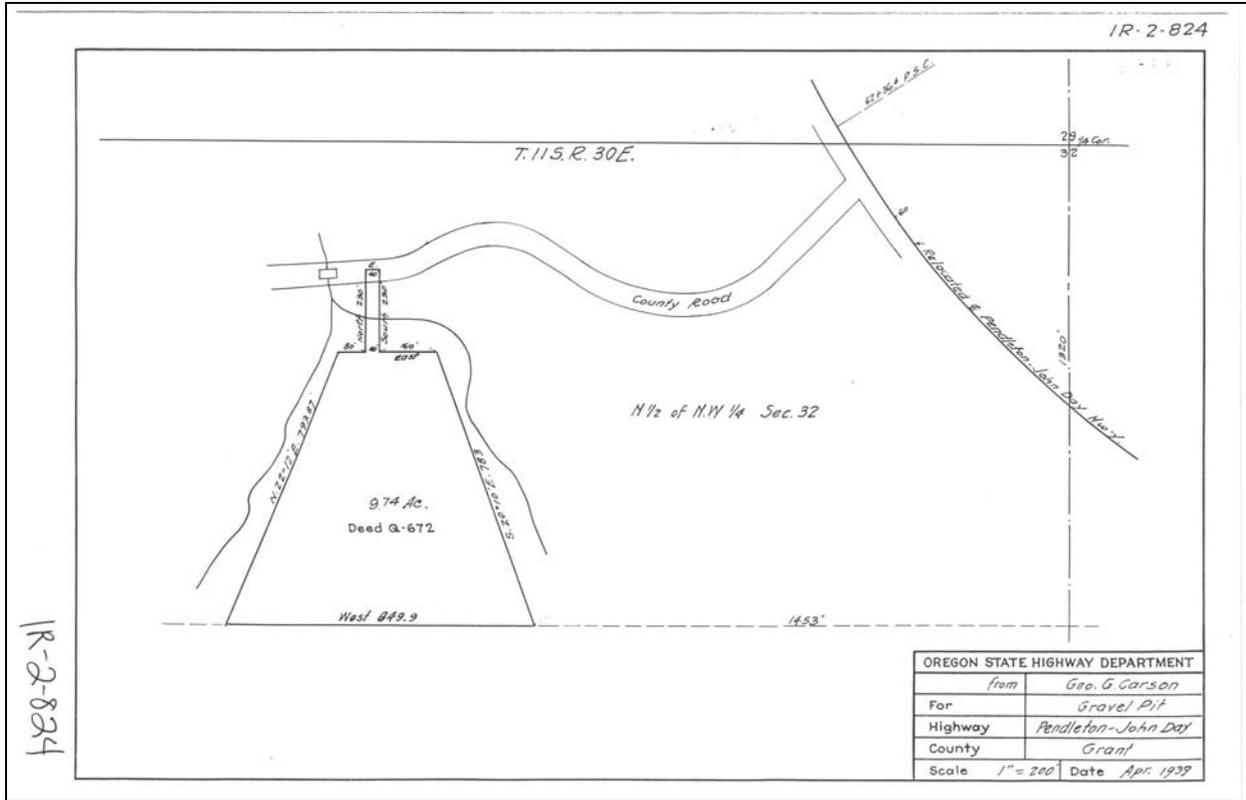


Aerial view of the site on the County Road adjacent to Highway 395.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Grant					14	0028	103.54	11S	30.0E	32
File ID		Source #	Date Visited	Map #			Type of Site			
06835		12-019-5	09/13/2000	1R-2-824			Raw Land			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
44 34'27.87000"	119 08'25.21000"	1401	9.74	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
Basalt	Tcp	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good to Fair			NA	150	100,000	150,000				
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	NA					
Adjacent Land Use										
Open space/Ranching/Private Quarry										
Remarks										
This site is located south of County Road 28 and west of Highway 395. This is raw land with no prior disturbance. A conversation with Jack Vaughan informed me that he wants our 9 acres of land for a trade of his processed aggregate. There is no screening with room to work. The terrain is flat.										
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 the county road.



Aerial view of the site located south of County Road 28.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Grant					14	0028	108.2	12S	30.0E	12
File ID		Source #	Date Visited	Map #		Type of Site				
25967, 25968		12-020-5	09/13/2000	1R-5-963		Raw Land				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
44 32'39.77000"	119 03'26.60000"	1197	9.99	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
Basalt	Tcp	NA		Slight to Decomposing			Massive to Highly Fractured			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good to Poor			NA	150	150,000	225,000				
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	NA					
Adjacent Land Use										
Open space										
Remarks										
This is raw land adjacent to the east of Highway 395. The rock is composed of multiple lava flows. Some of the flows are good quality intermixed with poor quality. There would be some screening with room to work. It appears that you can rip the material. The terrain is a gradual slope up about 10 degrees.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.743	2.802	16.6	5.0	2.0	6.1	0.9	4.4	0.5		
Material Use										
Quarry Rock (1998)										

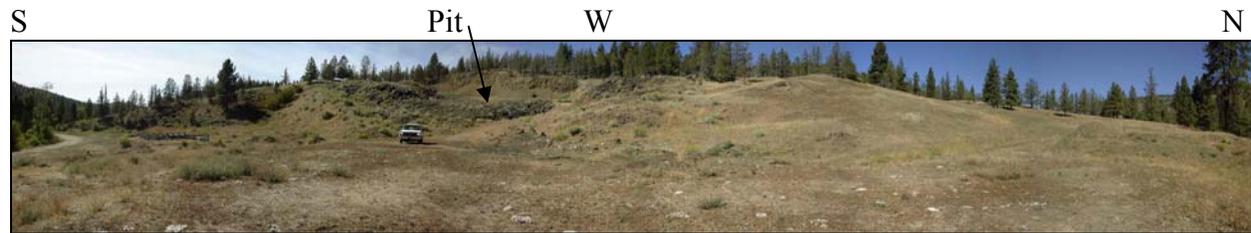


View of the raw land site looking northeast across Highway 395.



Close-up view of the fracture pattern.

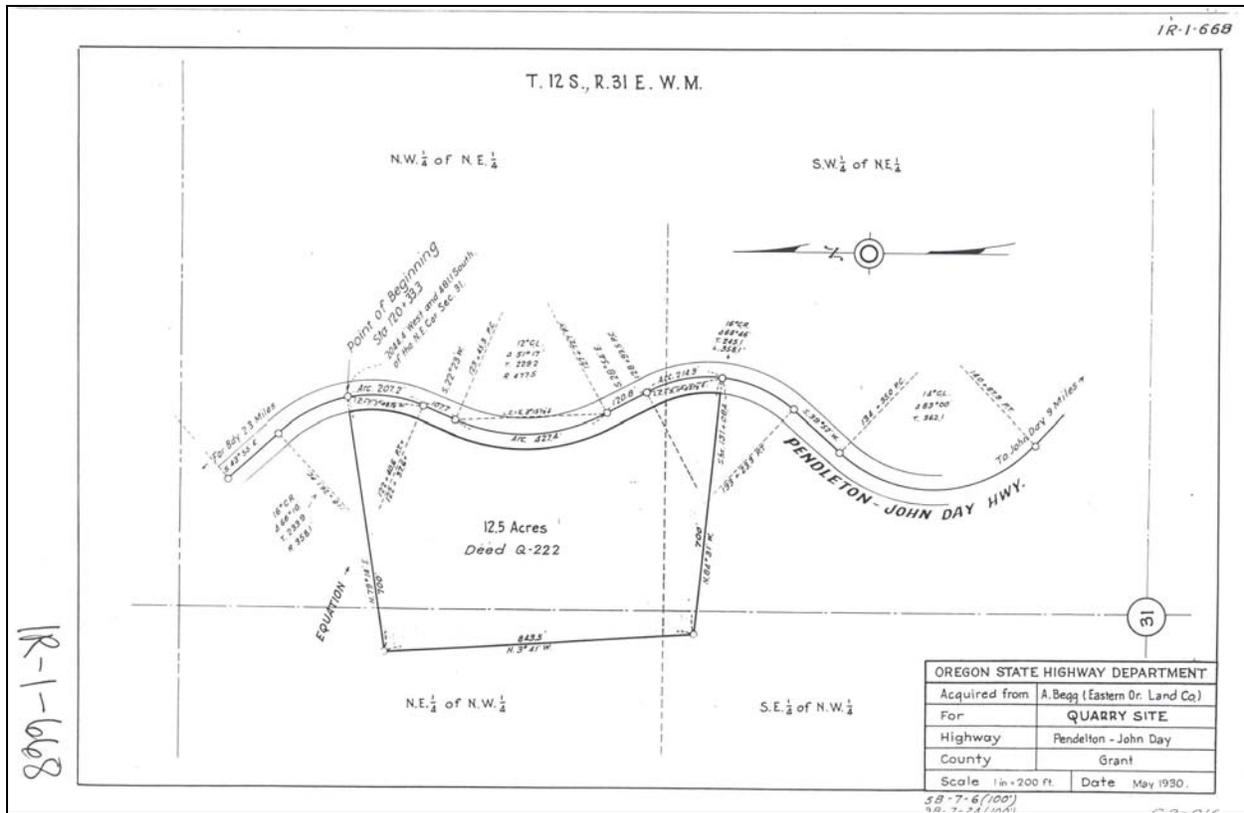
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Grant	Begg Quarry				14	0028	112.6	12S	31.0E	31
File ID		Source #	Date Visited	Map #		Type of Site				
Q0222		12-021-5	09/13/2000	1R-1-668		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
44 29'15.86368"	119 01'54.24896"	1030.29	12.5	<3						
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color		Weathering			Jointing			
Basalt	Tcp	Medium Dark Grey (N4)		Slight to Moderate			Highly to Moderately Fractured			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair to Good			R3-	240	60,000	90,000				
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	Adjacent to the east is Beech Creek.					
Adjacent Land Use										
Open space										
Remarks										
This site is located west of Highway 395 on the old highway alignment. The rock is a fine to medium-grain, highly fractured basalt. There is limited screening, with room to work. The top 15 feet of basalt can be moderately weathered. The terrain slopes up about 10 degrees. The site is used for waste rock. Some of the minerals are decomposing in to clays. The bridge on the old highway alignment is narrow and should be evaluated for haul trucks.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.86										
Material Use										
A/C										



View of the quarry site looking west, note the old highway alignment to the left of the image.



Close-up view of the highly fractured basalt found at the site, with the hammer for scale.

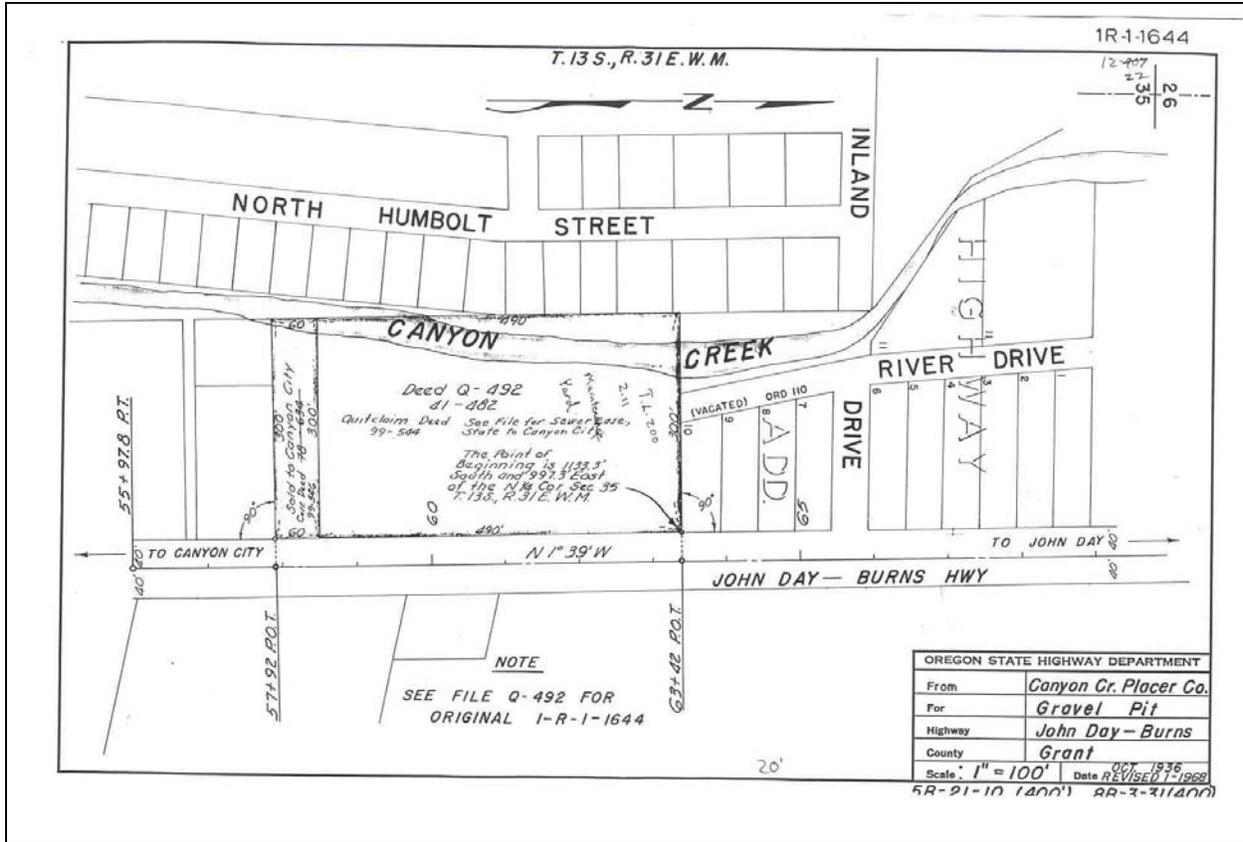


Aerial view of the site adjacent to Highway 395 on the old highway alignment.

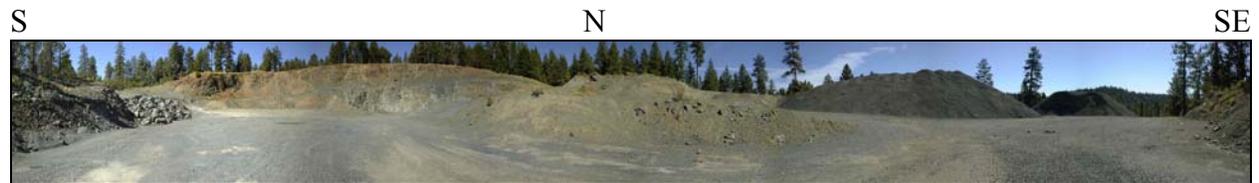
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Grant				14	0048	1.2	13S	31.0E	35
File ID		Source #	Date Visited	Map #		Type of Site			
03915		12-022-5	09/12/2000	1R-1-1664		Maintenance Yard			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
44 24'02.03000"	118 56'50.28000"	990	3.38	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					
Potentially Significant Site	Why			Open/Closed	Direction				
No	Maintenance Yard			Closed	Adjacent to Canyon Creek.				
Adjacent Land Use									
NA									
Remarks									
This is the Maintenance yard in Canyon City.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									



Aerial view of the Maintenance Yard in Canyon City.



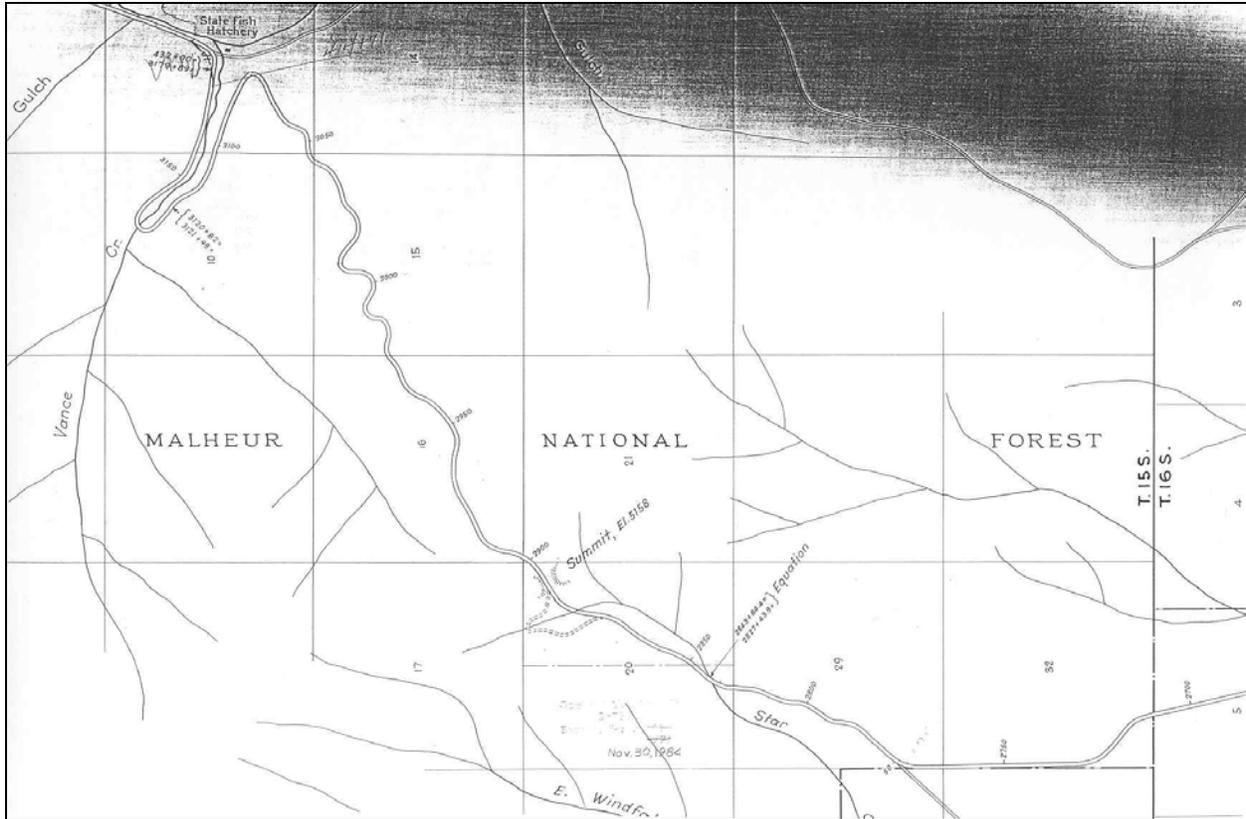
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Grant	Starr Ridge				14	0048	16.57	15S	31.0E	20
File ID		Source #	Date Visited	Map #			Type of Site			
Q0759		12-023-5	09/12/2000	4B-22-7			Quarry			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
44 15'19.50370"	119 01'30.35921"	1560.077	80	<5						
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color		Weathering			Jointing			
Sandstone	Trs	Medium Dark Grey (N4)		Fresh to Slight			Highly Fractured to Massive			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair to Good			R3+	165	200,000	300,000				
Potentially Significant Site	Why			Open/Closed	Direction					
No	Leased ground from the Forest Service.			Closed	NA					
Adjacent Land Use										
Open space										
Remarks										
This site is located north of Highway 395 off of Forest Service Road # 333. The rock is a medium to fine-grain, highly fractured sandstone (graywacke). You can rip the rock, but should drill and blast. There is very good screening and plenty of room to work. The overburden can be up to 6 feet thick with a moderate weathered zone to 15 feet. Records show that Maintenance uses this site due to the location at the summit. There is a moderate amount of calcite veinlettes throughout the rock. I calculated the quantity based on 40 acres to a depth of 25 feet. Leased ground from the Forest Service.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.56	2.58	14.6	12.2	10.3	7.3	1.5				
Material Use										
AC (1984)										



View of the site with rip-rap and stock piles.



Close-up view of the fracture pattern of the sandstone at this site.

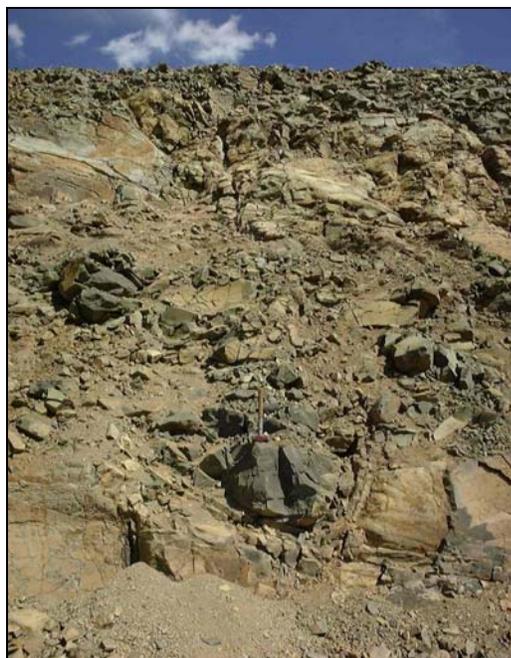


Aerial view of the quarry site off of Forest Service Road #333.

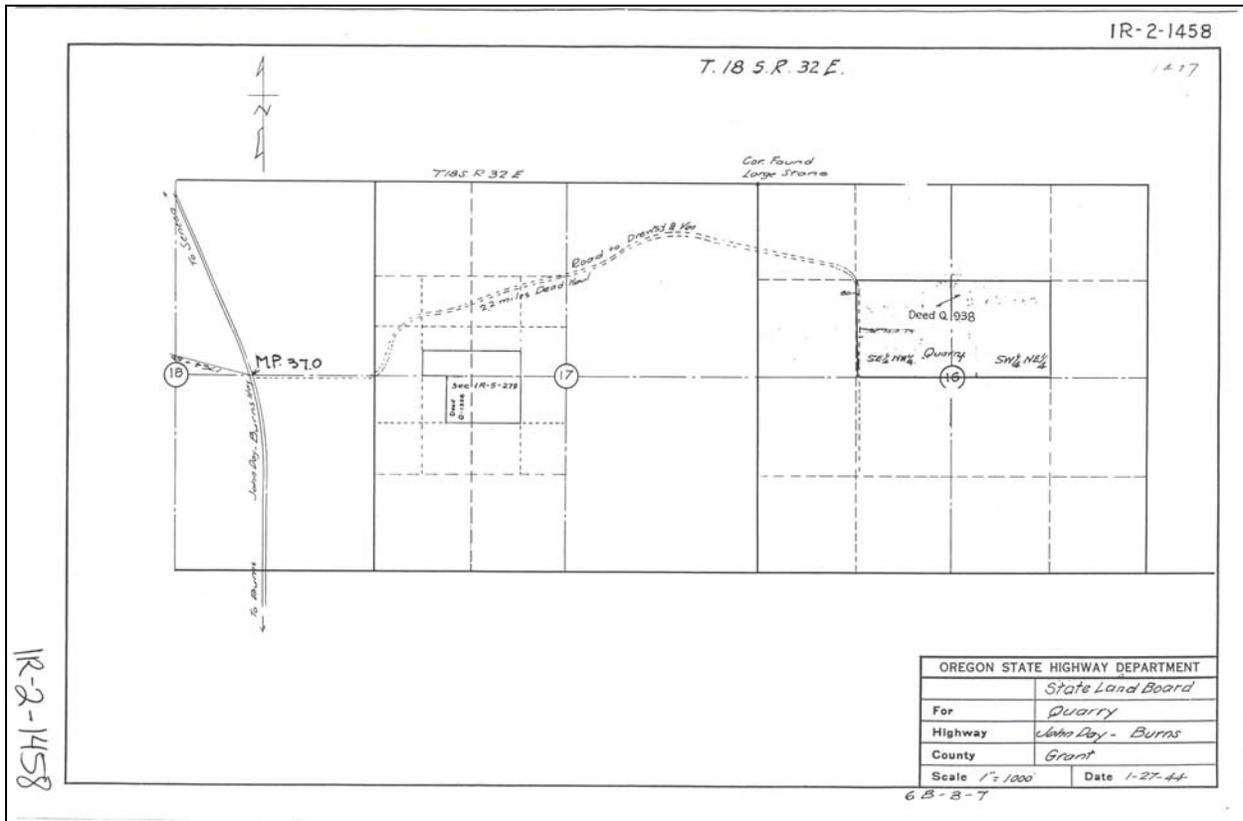
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Grant	Silvies Quarry				14	0048	37	18S	32.0E	16
File ID		Source #	Date Visited	Map #			Type of Site			
11477		12-037-5	09/12/2000	1R-2-1458			Quarry			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
44 00'50.26402"	118 53'14.36893"	1454.607	76.4	<5	12-0037					
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color		Weathering			Jointing			
Basalt	Tstv	Olive Grey (5Y 4/1)		Slight to Moderate			Highly Fractured			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair to Good			R3+	165	300,000	450,000				
Potentially Significant Site	Why				Open/Closed		Direction			
Yes	Large acreage, good rock, room to work, location, screening.				Closed		NA			
Adjacent Land Use										
Open space										
Remarks										
This site is east of Highway 395 about 1.5 miles off of Silvies Hopper Ranch Road. The rock is a slightly weathered, fine-grain, highly fractured olive grey basalt. There is good screening with ample room to work. The terrain is flat to gradually sloping. The site has had minor reclamation (no grass). You can rip the rock and acquire minor amounts of rip rap. There could be up to 5 feet of overburden.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
	2.725	15.1	11.0	10.0	13.0	27.0				
Material Use										
Emulsion Asphalt Aggregate (1999)										



View looking northeast across Silvies Hopper Ranch Road.



Close-up of the rock at the quarry.



Aerial view of the site north of Highway 395.

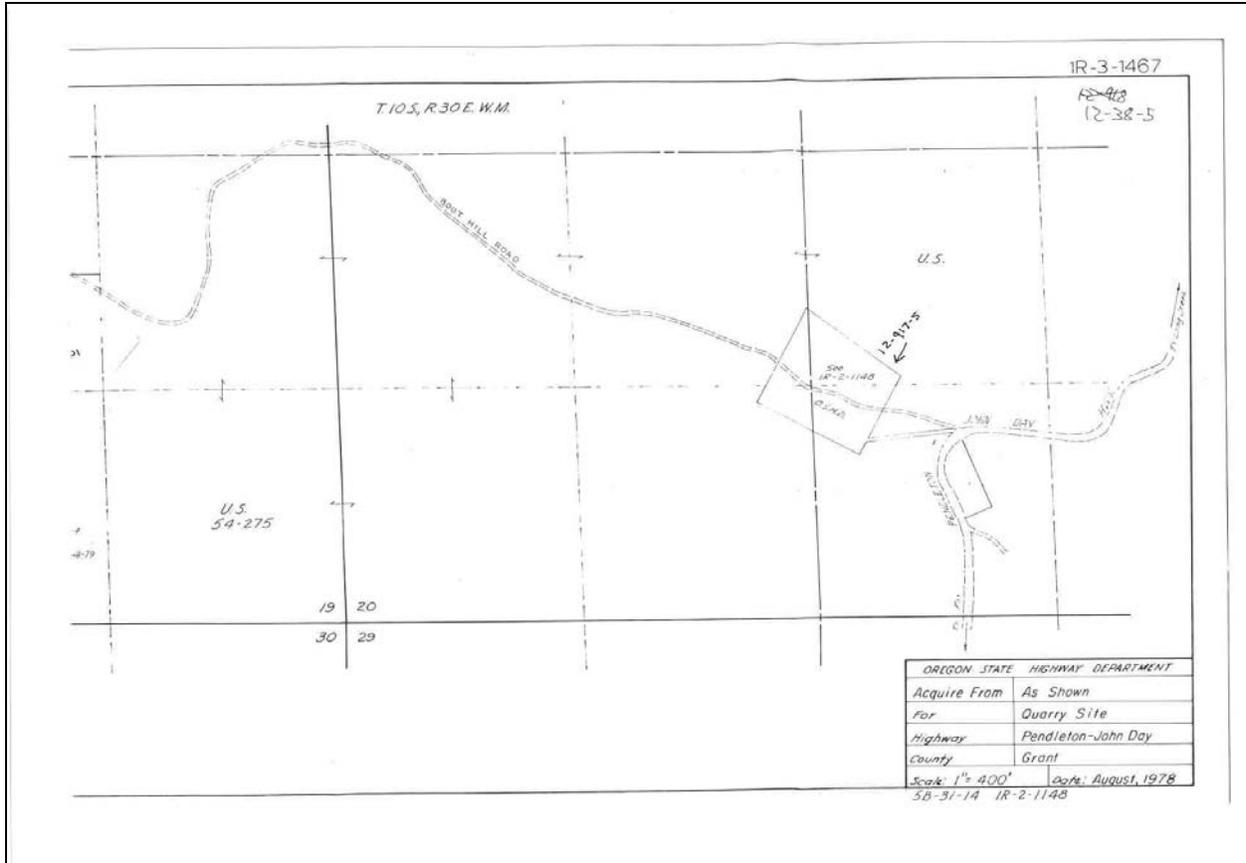
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Grant					14	0028	95.6	10S	30.0E	19
File ID		Source #	Date Visited		Map #			Type of Site		
50311		12-038-5	09/13/2000		1R-3-1467			Raw Land		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
44 40'51.44000"	119 08'59.06000"	1632	30	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
Basalt	Tcp	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Poor			NA	150	400,000	810,000				
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	NA					
Adjacent Land Use										
Open space										
Remarks										
This is raw land west of Highway 395 about 1.2 miles on Forest Service Road # 3970. The rock at the surface is a weathered scoriaceous basalt. Road cuts along the highway have thin lava flows of varying composition and weathering. The terrain is flat to a gradual slope away from the road. It can be steep to the west about 30 degrees. There is good screening and ample room to work. At the top of the hill on or near our ground is a small cabin with 6 radio antennas. Overburden could be thick in some places.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.94		14.4					15.6	0.9		
Material Use										
SANDING (1969)										

SW

N

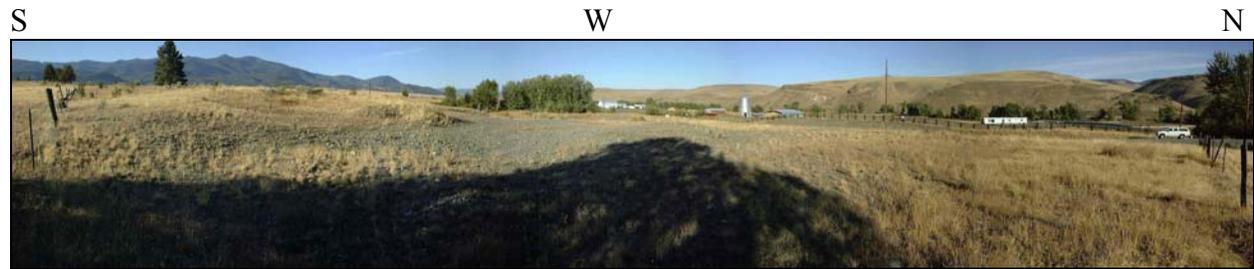


View of the site looking to the west.



Aerial view of the site off of Forest Service Road # 3970.

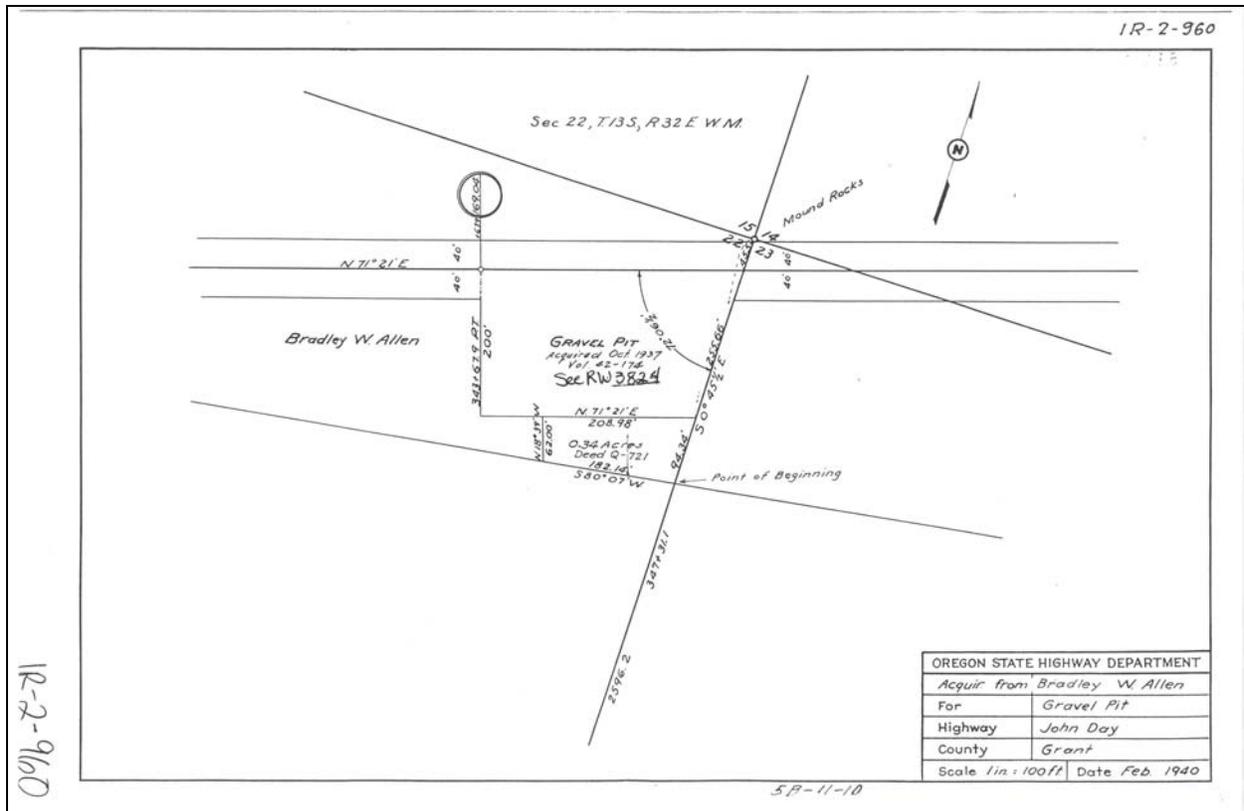
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Grant					14	0005	168.41	13S	32.0E	22
File ID		Source #	Date Visited	Map #		Type of Site				
07948, 04879		12-053-5	09/13/2000	1R-2-960		Gravel				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
44 25'54.26000"	118 50'21.13000"	1006	1.95	<1						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
Metamorphic Gravel	Qal	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair to Good			NA	120	16,000	25,920				
Potentially Significant Site	Why	Open/Closed		Direction						
No	NA	Closed		To the north about 700 meters is the John Day River.						
Adjacent Land Use										
Ranching										
Remarks										
This site is adjacent to and south of Highway 26. The material is a mix of sizes and shapes of metamorphic gravel. The largest is around small boulder size (5%), then cobble size (10%), then pebble (35%), and finally sand (50%). There is no screening and very limited room to work. There is a small catch basin on site for water run off.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



View of the gravel site looking west towards Highway 26.

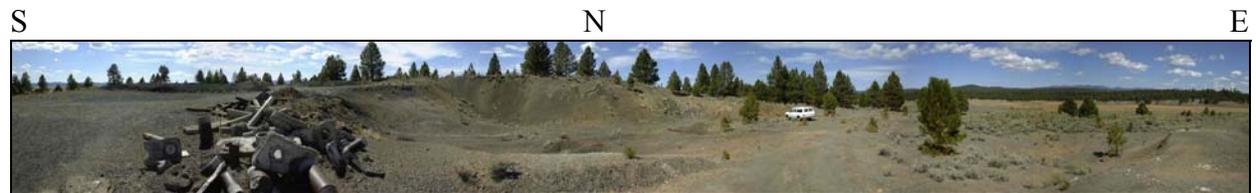


Close-up view of the gravel at this site.



Aerial view of the site adjacent to Highway 26.

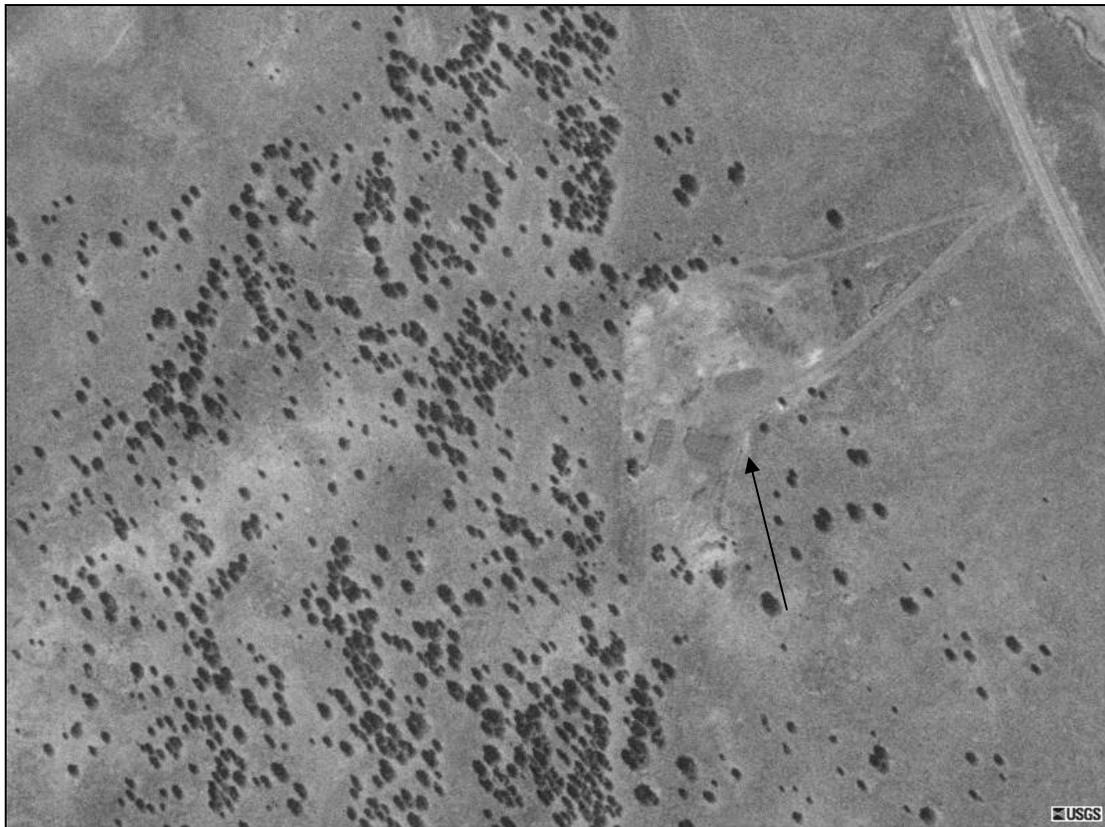
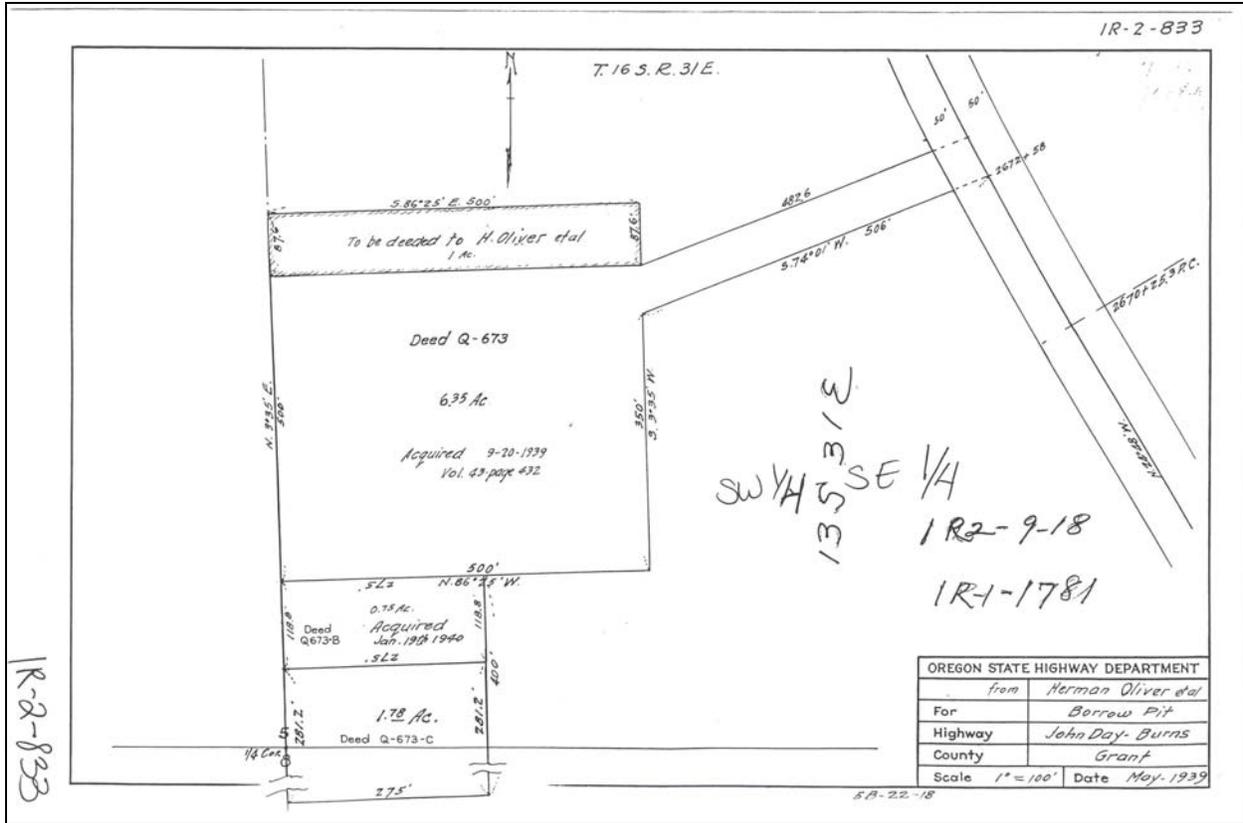
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Grant					14	0048	19.45	16S	31.0E	05
File ID		Source #	Date Visited	Map #			Type of Site			
07018		12-054-5	09/12/2000	1R-2-833			Quarry			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
44 12'28.46822"	119 01'35.15644"	1467.926	8.88	<1						
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color		Weathering			Jointing			
Siltstone/Mudstone	Ts	Medium Dark Grey (N4)		Slight to Fresh			Highly Fractured			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Poor			R2	155	70,000	146,475				
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	NA					
Adjacent Land Use										
Open space/Ranching										
Remarks										
This site is west of Highway 395 about 200 meters. The material here is a siltstone/mudstone with interbeds of sandstone. The property is used for waste material and grindings. There are some old vehicles and junk scattered throughout the site. There is no screening and room to work here. The terrain is fairly flat.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



View of the quarry site looking north, note the access point to the right of the image.



Close-up view of the material at this location.



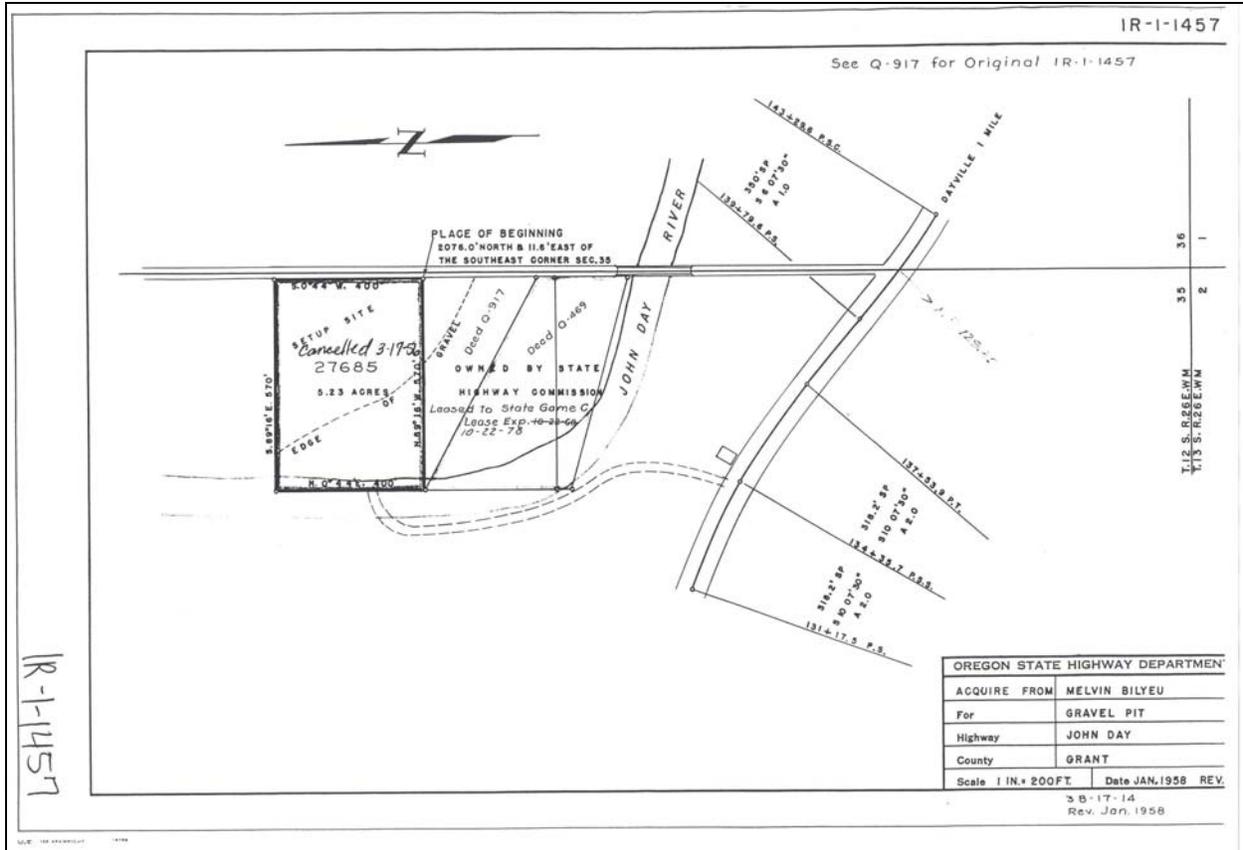
Aerial view of the quarry site that is adjacent to Highway 395.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Grant					14	0005	129.85	12S	26.0E	35
File ID		Source #	Date Visited	Map #		Type of Site				
02030, 02830, 11186		12-901-5	09/19/2000	1R-1-1457		Gravel				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
44 28'53.67000"	119 33'12.76000"	731	6.15	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)				
Good			NA	120	29,000	46,980				
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	Adjacent to the John Day River.					
Adjacent Land Use										
Farming/Ranching. One residence across the river about 250 meters.										
Remarks										
This site is north of Highway 26 about 400 meters, off of County Road 41. There is no access to this site anymore. The bridge over the John Day River is gone and there is no other way to get to the site. If we wish to use this property in the future we need a new access. This ground has mitigation potential. The gravel bar appears to be about 3 to 5 feet above the John Day River.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

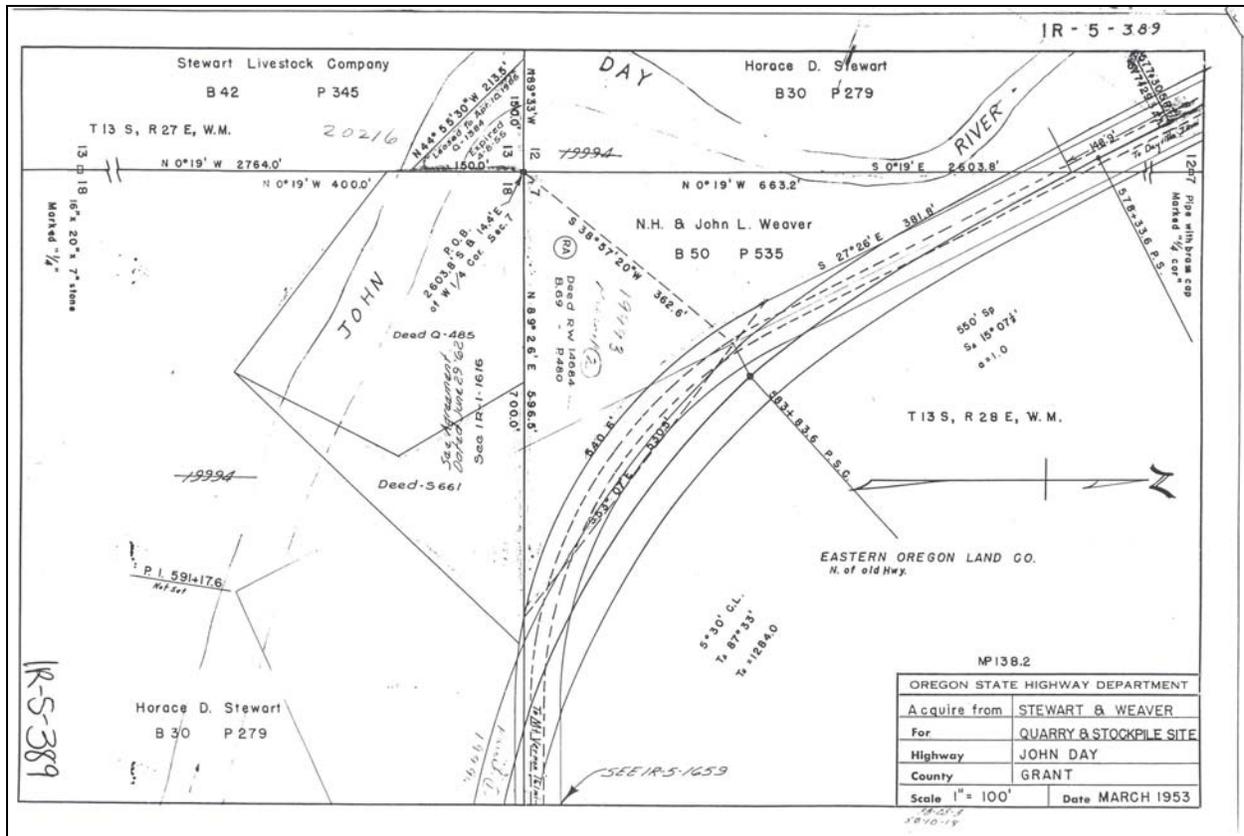
N



View to the north, from Highway 26, of the gravel bar on the north side of the John Day River.



Aerial view of the John Day River and the gravel bar.

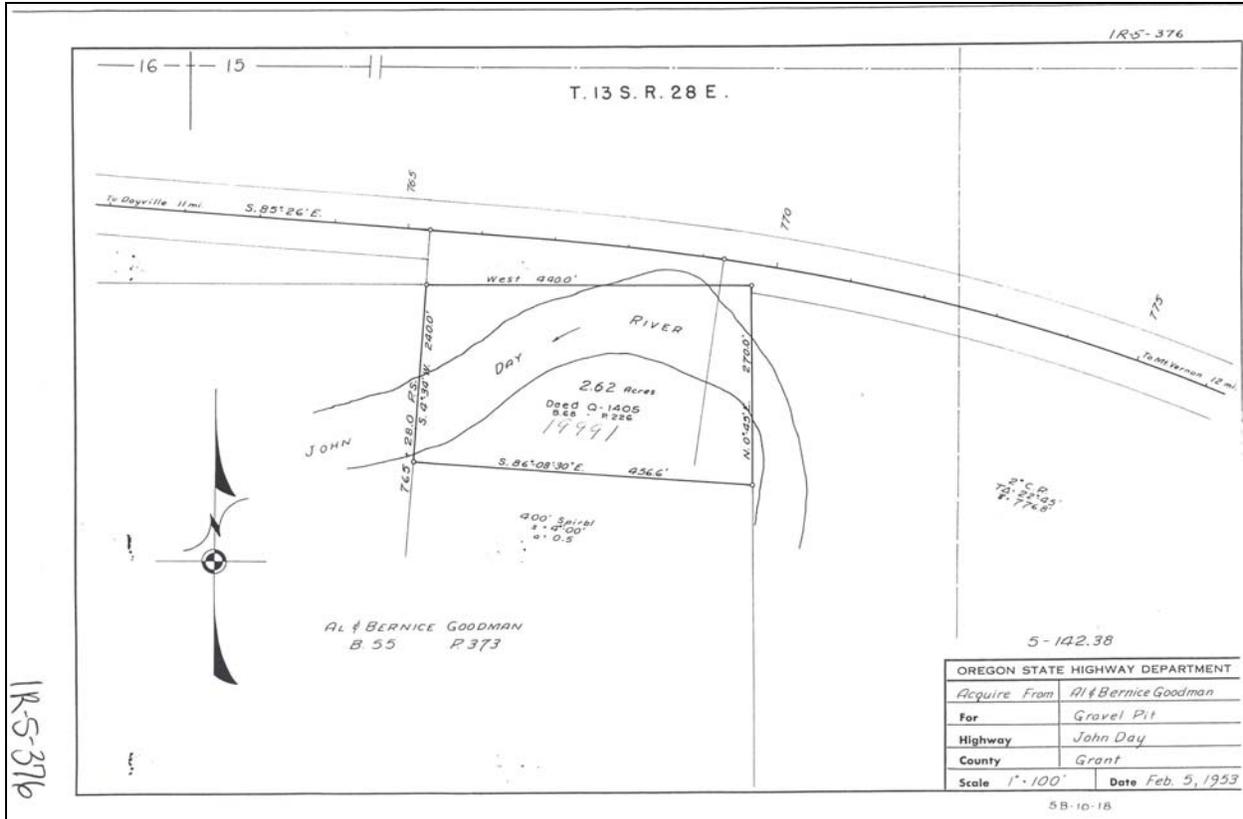


Aerial view of the stock pile site located adjacent to the John Day River and Highway 26.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Grant	Goodman Pit			14	0005	0	13S	28.0E	15
File ID		Source #	Date Visited	Map #			Type of Site		
19991		12-905-5	09/19/2000	1R-5-376			Gravel		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
44 26'19.87000"	119 20'39.19000"	792	2.62	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)		
Good			NA	120	9,000		14,580		
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			Closed	John Day River bisects the ground.				
Adjacent Land Use									
Farming/Ranching									
Remarks									
This property is adjacent to and south of Highway 26. The site is located on both sides of the river with the inside radius controlling the bulk of the ground. There is no access to the property anymore. The mile point on the 1R-map is in question. This is a small site that is about 3 to 4 feet above the river. This site has the potential for mitigation. This ground and site 12-906-5 are important for protecting the embankment along the highway.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

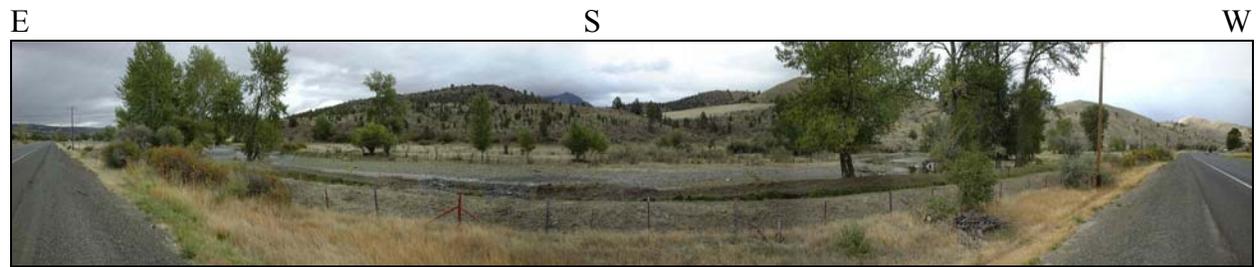


View of the gravel site located on a bend of the John Day River.



Aerial view of the gravel site located on the John Day River.

County	Site Name		Dist	Hwy	Mile Pt	TWP	RGE	Sect
Grant			14	0005	0	13S	28.0E	14, 15
File ID		Source #	Date Visited	Map #		Type of Site		
10783, 10784		12-906-5	09/19/2000	1R-2-1347		Gravel		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #			
44 26'05.62000"	119 19'30.68000"	792	6.36	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)		
Good			NA	120	14,000	22,680		
Potentially Significant Site	Why			Open/Closed	Direction			
No	NA			Closed	The John Day River bisects the ground.			
Adjacent Land Use								
Farming								
Remarks								
This site is south of and adjacent to Highway 26. The John Day River and an irrigation ditch bisect the property. There is no access to this site due to new fencing in the area. The ground is about 3 feet above the river level. There is a small stock pile site associated with this gravel site. This site might have mitigation potential. The ground is located on the inside of the river radius.								
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.
Material Use								



View looking south from Highway 26 at the gravel site.

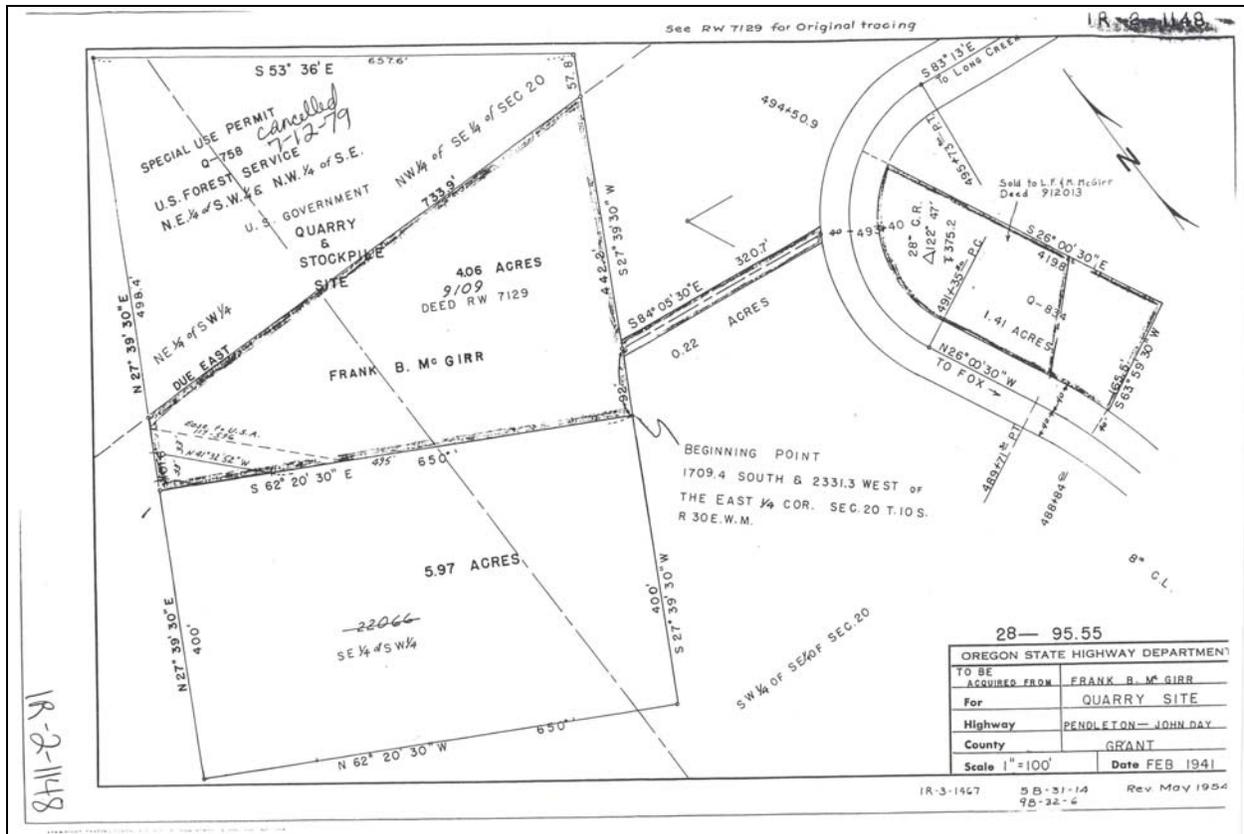
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Grant				14	0005	0	13S	32.0E	30
File ID		Source #	Date Visited	Map #			Type of Site		
04894		12-908-5	09/13/2000	1R-1-1781			Gravel		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
44 25'03.36000"	118 54'55.40000"	990	4.22	NA					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
Gravel	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	Adjacent to and in the John Day River.				
Adjacent Land Use									
Open space/Ranching									
Remarks									
This site is adjacent to and north of Highway 26. The property is on either side of and in the John Day River. The site might have potential for mitigation.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

W

NW



View looking across Highway 26 at the John Day River and the gravel site beyond.



Aerial view of the site off of Forest Service Road 3970 at the summit of Highway 395.

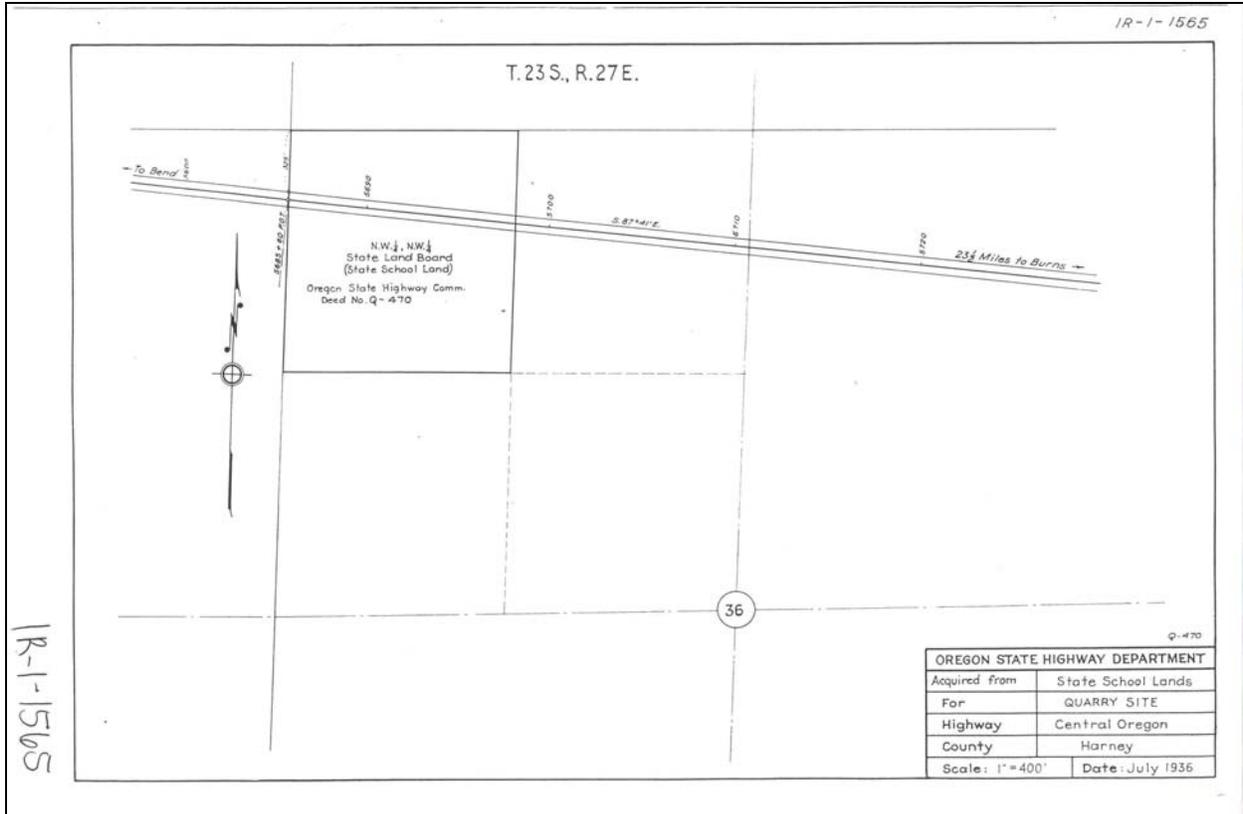
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Harney	Sage Hen Hill				14	0007	108.4	23S	27.0E	36
File ID		Source #	Date Visited	Map #		Type of Site				
Q0470		13-002-5	05/16/2001	1R-1-1565		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
43 32'25.55801"	119 26'06.09756"	1324.11	40	<9	13-0086					
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color		Weathering		Jointing				
Basalt	QTb	Medium Dark Grey (N4)		Slight to Fresh		Highly Fractured				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair			R3+	171	484,000	726,000				
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	NA					
Adjacent Land Use										
Open Space										
Remarks										
This site is located on both sides of Highway 20. The rock here is a fine-grain, highly fractured basalt. There is limited to no screening from the highway. The terrain is fairly flat. The depth of the basalt is unknown and would need to be drilled. Part of the site is used for waste rock. There is some mixing of volcanics and soils here. Weathered zone could be 6 feet deep. Thin rind on the basalt. (Elongated pieces?) 140,000 cubic yards have been removed.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.59	2.67	15.1	7.8	2.4						
Material Use										
AC (1985)										



View looking northeast from Highway 20 of the site.

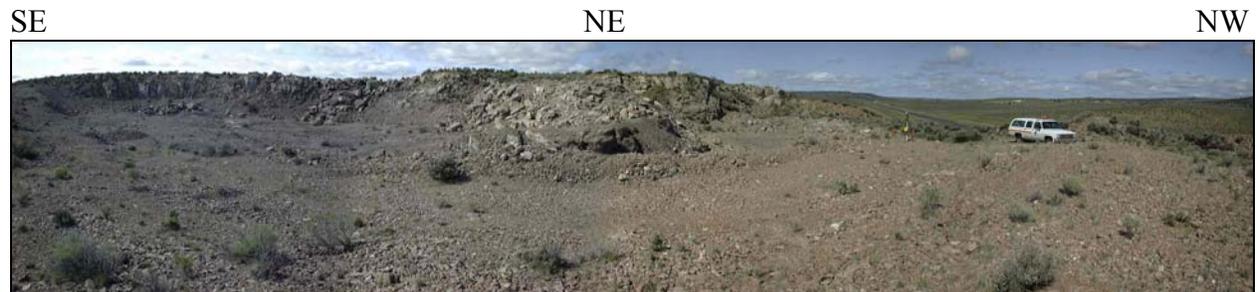


Close-up view of the quarry wall at the site.



Aerial view of the site bisected by Highway 20.

County	Site Name	Dist	Hwy	Mile Pt	TWP	RGE	Sect	
Harney	MP 122	14	0007	122.4	24S	30.0E	07, 08	
File ID		Source #	Date Visited	Map #		Type of Site		
21906		13-005-5	05/16/2001	1R-1-634		Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #			
43 30'42.83382"	119 09'30.56314"	1282.623	13.87	<5				
Comments								
GPS acquired in the pit.								
Rock Type	Unit	Color	Weathering		Jointing			
Welded Tuff	Tat	Pale Red 10R 6/2	Decomposing to Fresh		Highly Fractured to Massive			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)		
Poor to Fair			R1 to R3	148	320,000	639,360		
Potentially Significant Site	Why			Open/Closed	Direction			
No	NA			Closed	NA			
Adjacent Land Use								
Ranching/ Residence adjacent to the southeast								
Remarks								
This site is located adjacent to and south of Highway 20. The rock here is a welded tuff with flattened pumice throughout. It decomposes very easy when exposed to surface conditions. There is limited screening with room to work. You can rip the material. There are many stuck drill bits at this site. We also use this site for waste rock material. About 130,000 cubic yards of material have been removed to date. This is the wrong lithology for road construction (fill only).								
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.
2.2	2.24	21	1.7	0.5			16.6	0.4
Material Use								
(1975)								



View of the quarry site located south of Highway 20.



Close-up view of the rip-rap at the site.

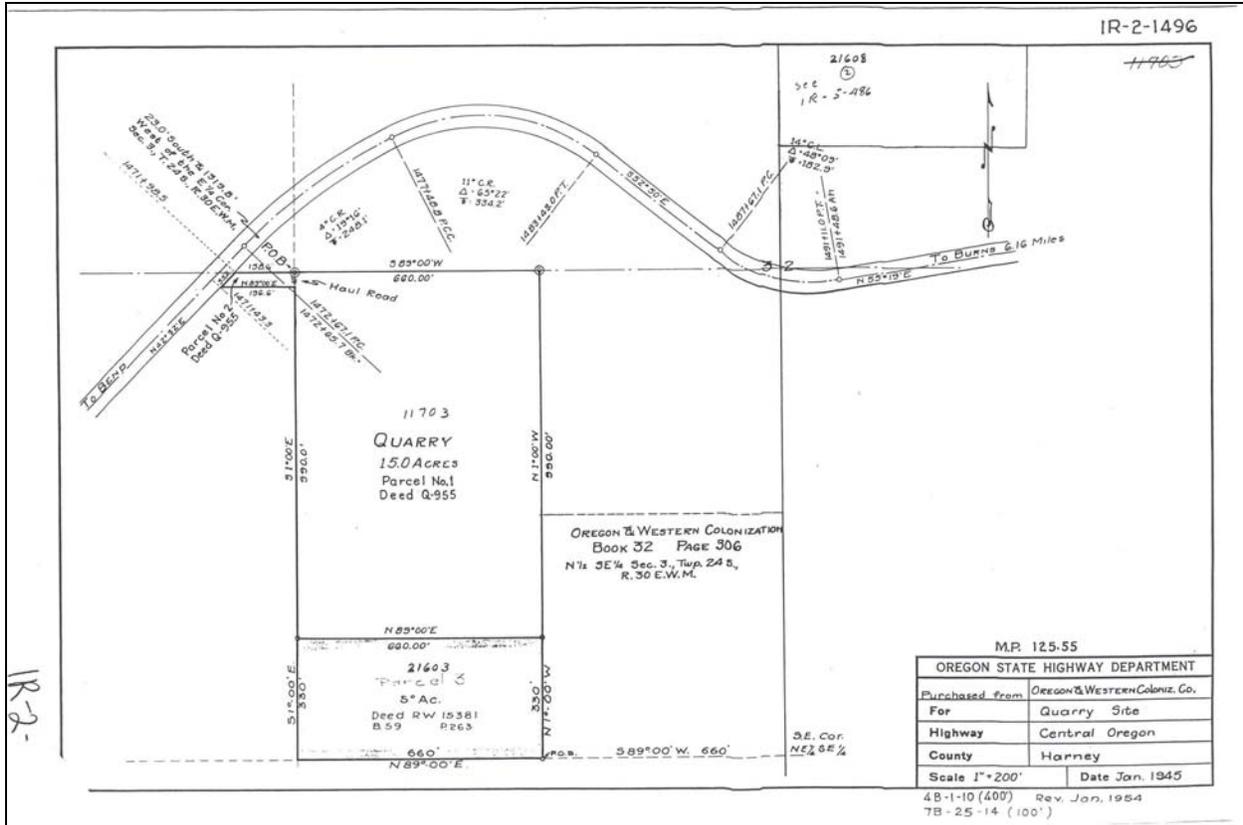
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Harney					14	0007	125.4	24S	30.0E	03
File ID		Source #	Date Visited	Map #			Type of Site			
21603, 11703		13-006-5	05/16/2001	1R-2-1496			Quarry			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
43 31'07.08000"	119 06'13.27000"	1283	20.16	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
Cinder/Basalt	Tvm	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair			NA	120	200,000	300,000				
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			NA	NA					
Adjacent Land Use										
Open Space/ Ranching										
Remarks										
This site is south of Highway 20 about 50 meters. The access is over grown with no defined road to the site. The material is composed of cinder. We no longer use this site but use site 13-007-5 which is less than 1/2 mile away. There would be no screening from the highway, but there would be ample room to work. The site occupies a small hill.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

E

S



View looking southeast across Highway 20 at the quarry site.



Aerial view of the quarry site adjacent to Highway 20.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Harney				14	0007	125.6	24S	30.0E	02
File ID		Source #	Date Visited	Map #			Type of Site		
21608		13-007-5	05/16/2001	1R-5-486			Cinder Pit		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
43 31'20.18257"	119 05'53.18366"	1283.488	13.8	<7		13-0027			
Comments									
GPS acquired in the pit.									
Rock Type	Unit	Color		Weathering			Jointing		
Cinder	Tvm	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Good			NA	120	50,000	75,000			
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			Closed	NA				
Adjacent Land Use									
Rural Residential/ BLM Office									
Remarks									
This site is adjacent to and south of Highway 20. This site is a cinder pit that has no screening from the highway. The material is very clean and easy to screen. There is ample room to work. The pit floor is at road elevation and could be lowered another 10 to 20 feet.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
		19.3					10.5	1.6	
Material Use									
Sanding (1986)									

S

NE



View of the cinder pit that is close to Highway 20.

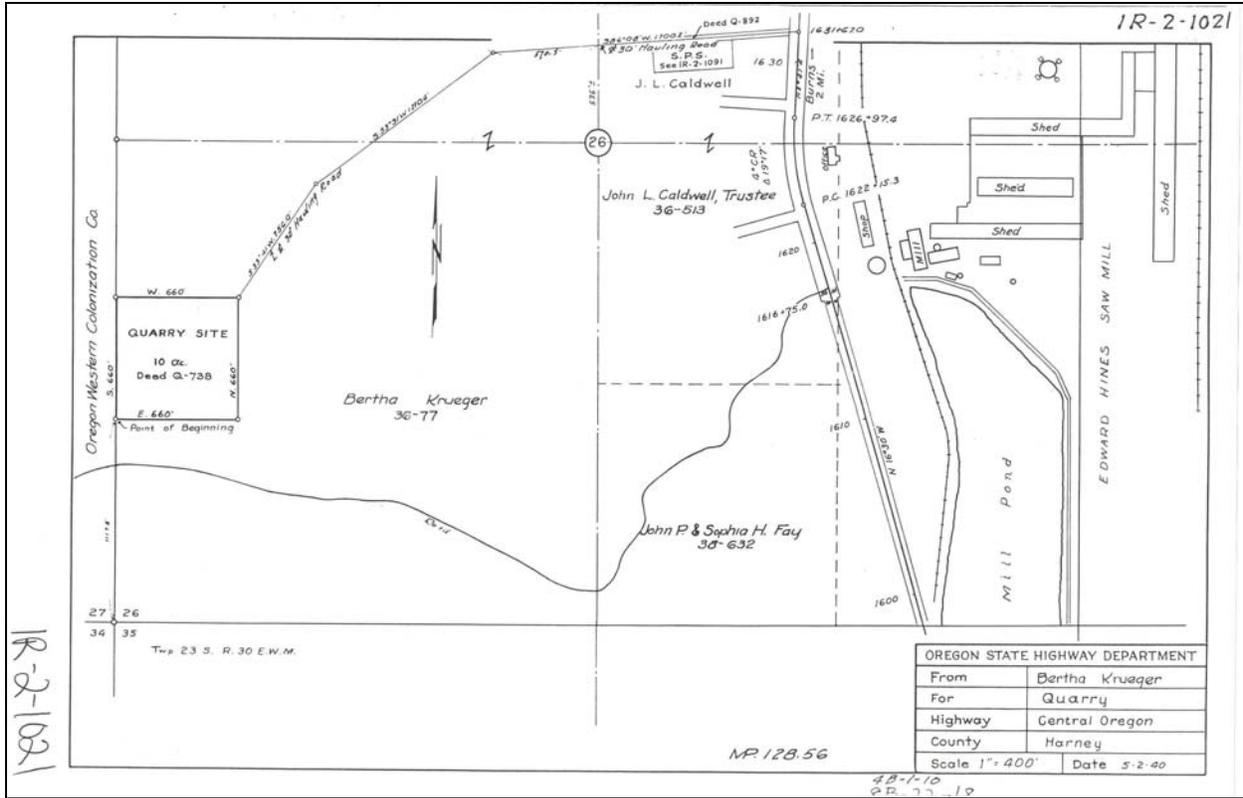
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Harney				14	0007	128.4	23S	30.0E	26
File ID		Source #	Date Visited	Map #			Type of Site		
08305, 08360		13-008-5	05/15/2001	1R-2-1021			Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
43 32'39.70329"	119 05'59.02251"	1353.703	10	<1					
Comments									
GPS acquired along the county road.									
Rock Type	Unit	Color		Weathering			Jointing		
Basalt	Tvm	NA		Slight			Highly Fractured		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Fair			R1 to R3	150	175,000	354,375			
Potentially Significant Site	Why			Open/Closed	Direction				
No	Too Small			Closed	NA				
Adjacent Land Use									
Open Space									
Remarks									
This site is about 5/8 of a mile west of Highway 20. The access road is no longer evident. I acquired access to the site from the near by county road. The rock here is a fine-grain ,platy basalt. The basalt flow is thin and commingles with the cinder pit that is privately owned. There is room to work with good screening. The terrain is moderate (7 degrees) and should pose no problems. This ground is used as a major dumping ground and should be fenced with a sign. 25,000 cubic yards have been removed.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
2.54	2.69	17.2	2.2	0.3			12.2	0.5	
Material Use									
(1976)									

SW

NE



View of the site looking at the talus cliff face.



Aerial view of the of the quarry site.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Harney				14	0007	134.0	22S	31.0E	31
File ID		Source #	Date Visited	Map #			Type of Site		
04028, 03914		13-010-5	05/24/2001	1R-1-1648			Borrow		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
43 37'03.59000"	119 02'35.93000"	1280	3.74	<5					
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			NA	120	30,000	48,600			
Potentially Significant Site	Why			Open/Closed	Direction				
No	Too Small			Closed	Adjacent to Foley Slough				
Adjacent Land Use									
Rural Residential									
Remarks									
This site is northwest of Highway 20 about 3/4 of a mile. The material is composed of cobble size and less volcanic gravel. There is about 50% gravel and 50% sand/silt. You could lower the pit another 12 feet to reach the slough elevation. Residence adjacent. It appears that someone is storing there items in our pit. Small acreage on fairly flat terrain.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

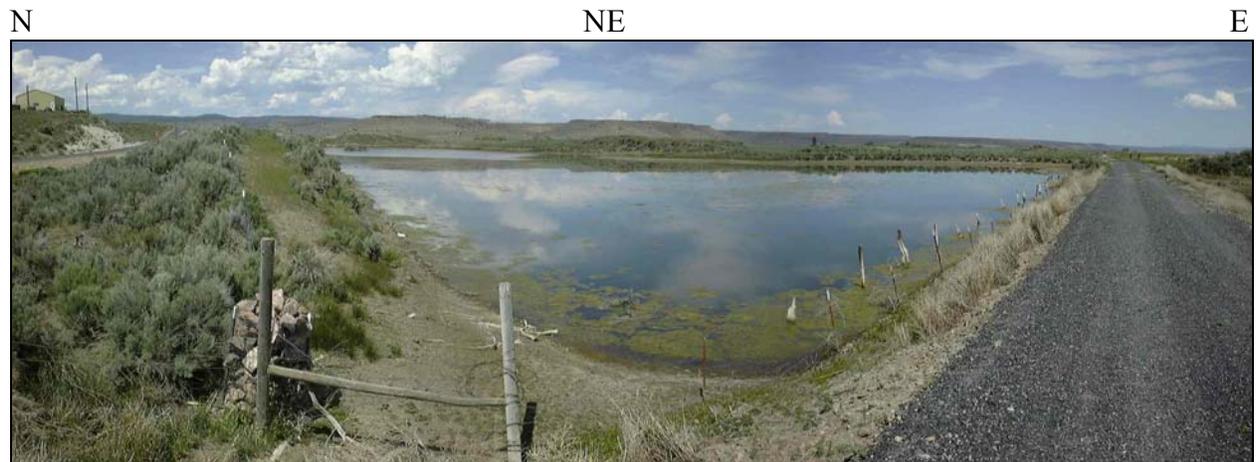


View looking northwest at the borrow site. Note the stored items to the left.

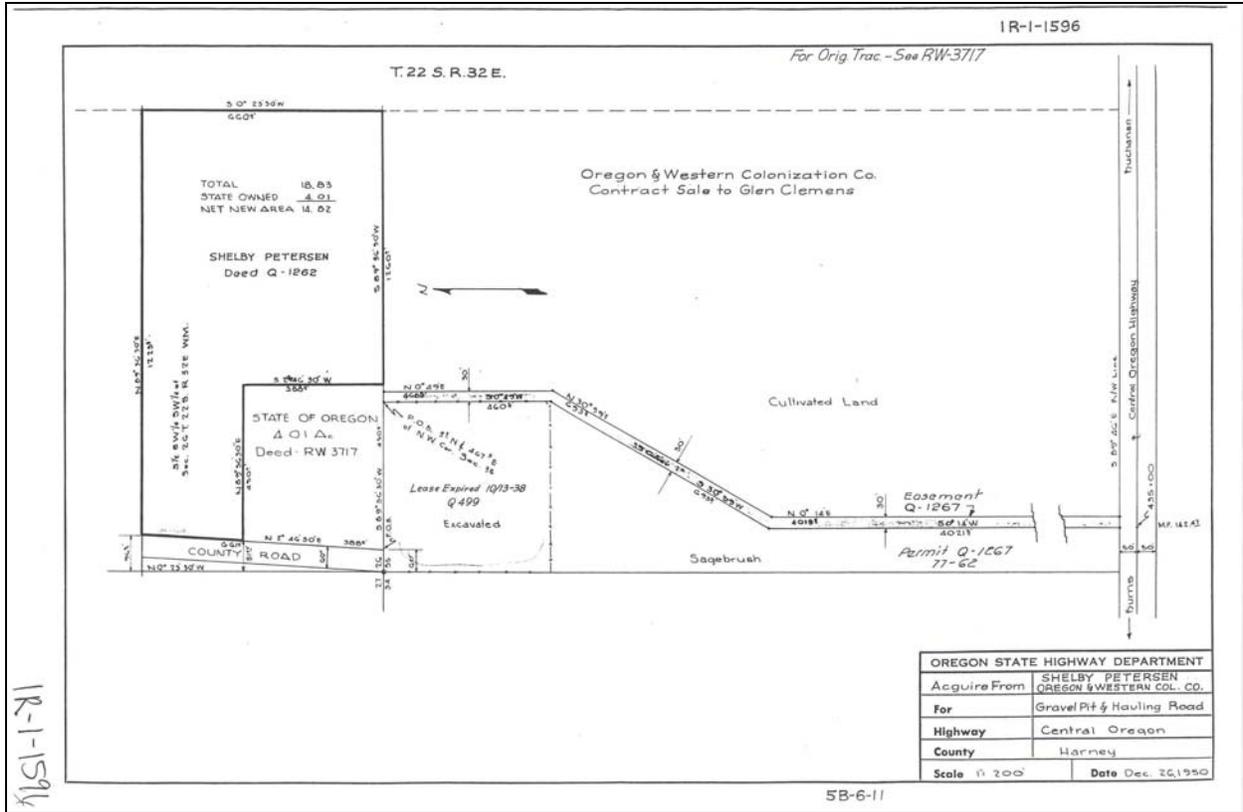


Close-up view of the material at the site.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Harney				14	0007	142.27	22S	32.0E	26
File ID		Source #	Date Visited	Map #			Type of Site		
17050, 04874, 17051		13-011-5	05/24/2001	1R-1-1596			Borrow		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
43 37'41.26000"	118 51'43.08000"	1270	22.39	<7					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
Volcanic Colluvium	Qal	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Fair			NA	120	160,000	259,200			
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			NA	The pit is full of water.				
Adjacent Land Use									
Ranching/ Farming/ Residence approximately 300 meters.									
Remarks									
This site is located about one mile north of Highway 20, adjacent to Reed County Road. The gate for the haul road was locked and I was able to get to the site from the county road. The site has more ground that can be developed if the situation warranted. The material at this location has 40% volcanic gravel and 60% sand/silt. This has potential for more wetland development to mitigate. The terrain is flat and is level with the elevation of the road. Our haul road has been encroached upon.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									



View of the borrow site looking northeast from Reed County Road.

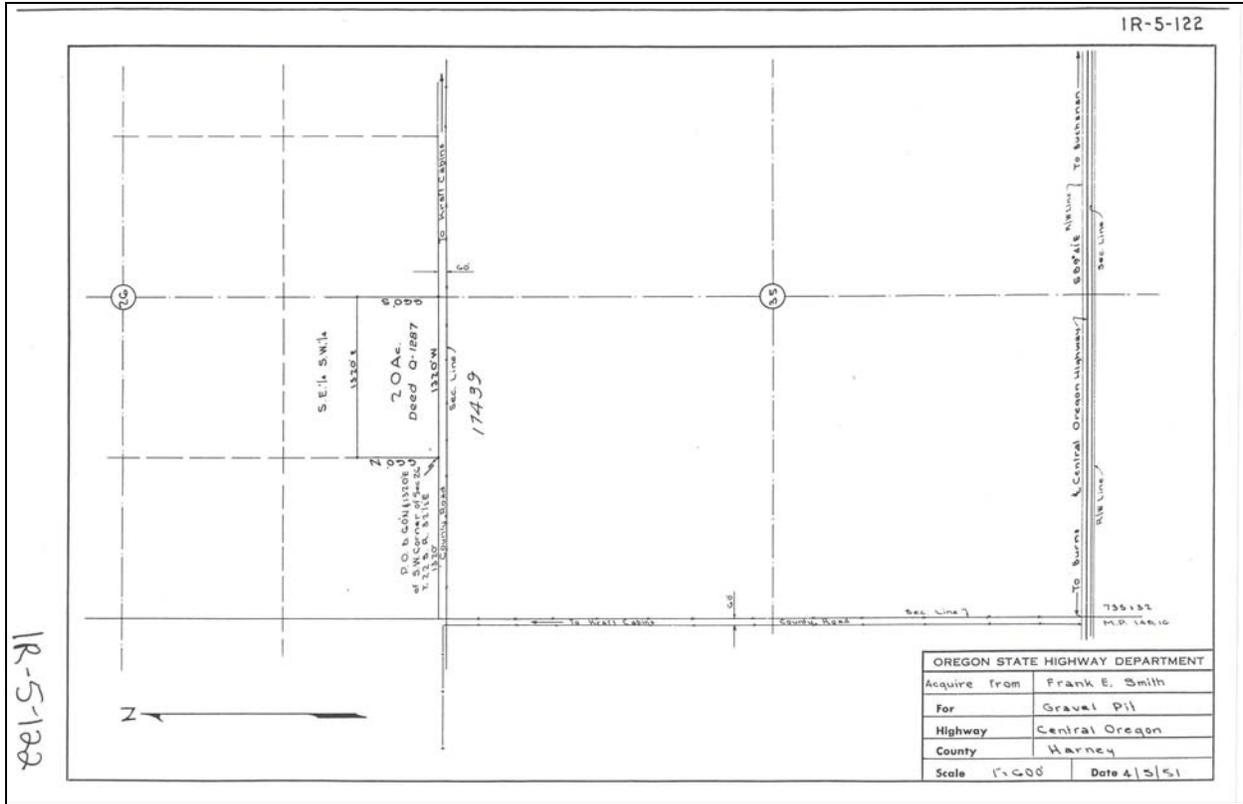


Aerial view of the site located adjacent to Reed County Road.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Harney				14	0007	147.9	22S	32.5E	26
File ID		Source #	Date Visited	Map #			Type of Site		
17439		13-012-5	05/24/2001	1R-5-122			Borrow		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
43 37'41.26000"	118 44'25.86000"	1277	20	<17					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
Volcanic Colluvium	Qal	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Fair			NA	120	30,000	45,000			
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			Closed	NA				
Adjacent Land Use									
Ranching/ Farming									
Remarks									
This site is located about one mile north of Highway 20 on a county road. This site is near depletion and would need evaluation to see if the pit could be lowered. The material at this location is composed of pebble and less gravel (40%) and sand/silt (60%). There is room to work but no screening from the county road. The terrain is flat. There was no evidence of any water in the pit.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									



View of the borrow site looking northeast, note Highway 20 to the right of the image.



Aerial view of Highway 20 and the borrow site.

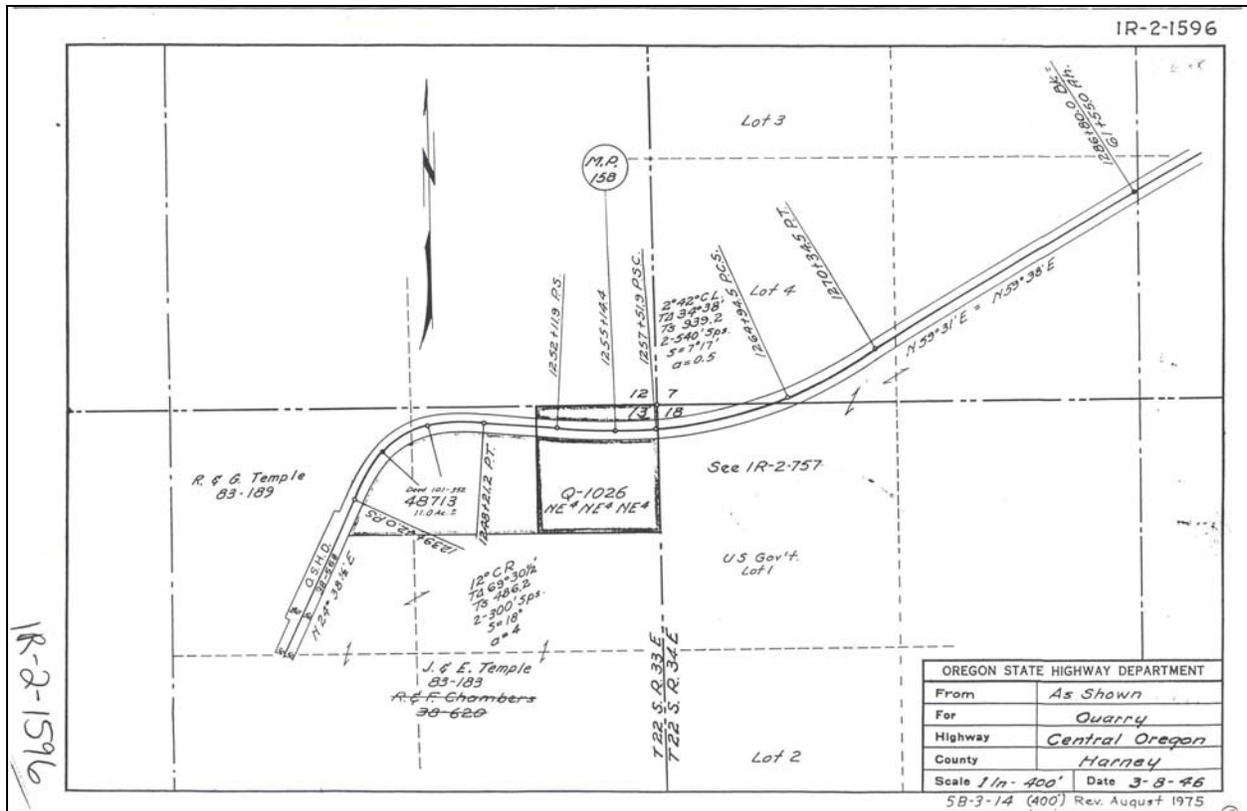
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Harney	Buchanan Quarry			14	0007	158	22S	33.0E	13
File ID		Source #	Date Visited	Map #			Type of Site		
48713, 12688		13-015-5	05/24/2001	1R-2-1596, 1R-2-757			Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #				
43 39'58.16208"	118 35'32.84500"	1413.564	21	NA	13-0041				
Comments									
GPS acquired in the pit.									
Rock Type	Unit	Color		Weathering			Jointing		
Basalt	Tba	Medium Dark Grey (N4)		Slight to Fresh			Highly Fractured		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Good			R3+	166	300,000	450,000			
Potentially Significant Site	Why			Open/Closed	Direction				
Yes	Good size, quality and quantity			NA	NA				
Adjacent Land Use									
Open Space									
Remarks									
This site is located adjacent to and south of Highway 20. The rock here is a fine-grain, highly fractured basalt. You can rip the material. There is ample room to work with good screening from the road. The terrain is fairly gradual up near the summit. There are some steep narrow canyons that will effect the pit design in the future. There is only one small pit (100 meters ²)and it had some water in it. Most of the site is in use for stockpiling. There is more ground associated with this site than the 21 acres reported. Part of the ground is owned by USA.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
	2.576	15.9	5.0	2.0	16.6	74.0			
Material Use									
Coarse AC Aggregate (1999)									



View of the quarry site near Highway 20.



Close-up view of the fracture pattern of the basalt at this location.



Aerial view of the quarry site located adjacent to Highway 20.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Harney				14	0007	161	22S	34.0E	04
File ID		Source #	Date Visited	Map #			Type of Site		
26380		13-016-5	08/14/2001	1R-5-1007			Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
43 41'23.45343"	118 32'30.36609"	1496.546	20	<1					
Comments									
GPS acquired next to the pit.									
Rock Type	Unit	Color		Weathering			Jointing		
Basalt	Tba	Medium Grey (N5)		Slight			Moderate Fracture		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Poor to Fair			R2+	155	160,000	334,800			
Potentially Significant Site	Why			Open/Closed	Direction				
No	USA Ground			Closed	NA				
Adjacent Land Use									
Open Space									
Remarks									
Highway 20 bisects this ground near Stinking-Water Pass Summit. The rock here is a poor quality, vesicular basalt. Some of the flows are of better quality, but thin. The ground is gradual to flat with room to work, but no screening. BLM owned.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

NE

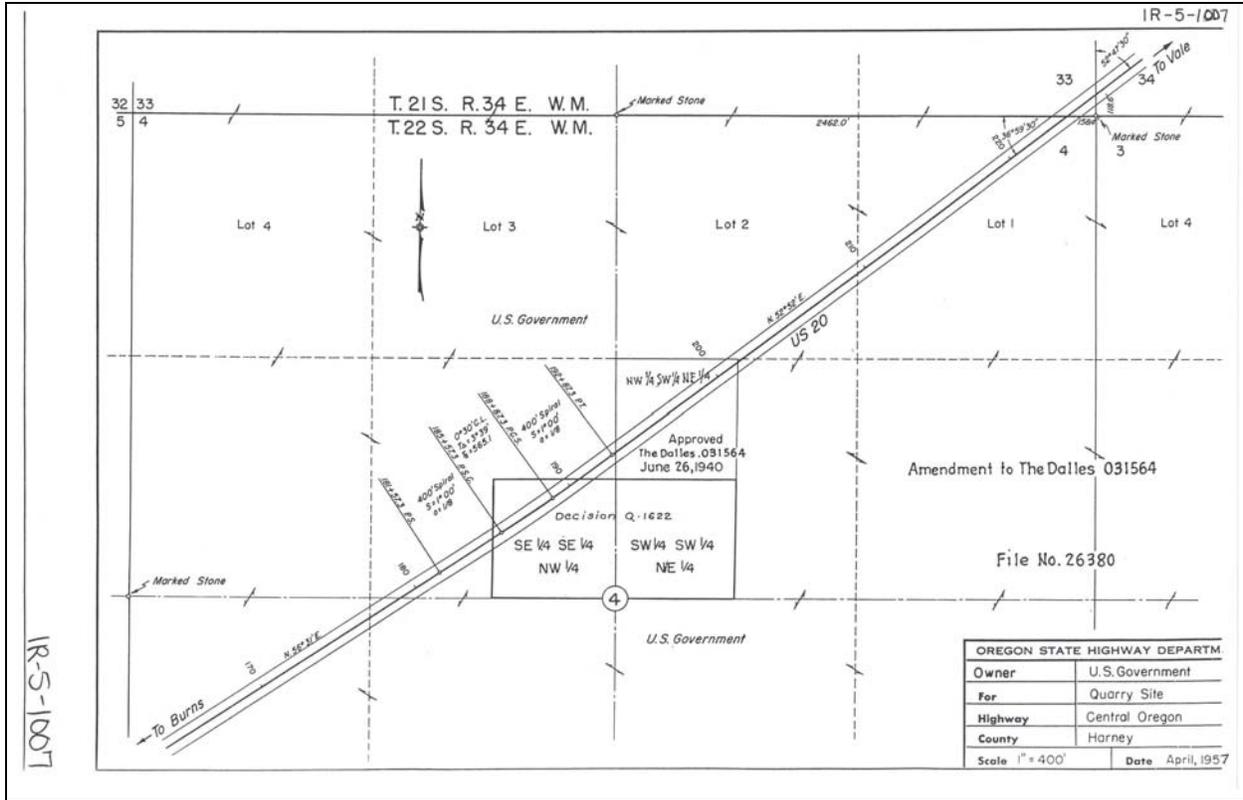
S



View of the quarry site near Stinking-Water Pass summit.



Close-up view of the large basalt rock at this site.



Aerial view of the quarry site located near the summit of Stinking-Water Pass.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Harney	Stinkingwater Sand Shed				14	0007	164.98	21S	34.0E	23
File ID		Source #	Date Visited	Map #		Type of Site				
13300,Q0742		13-017-5	08/14/2001	1R-2-757		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
43 44'15.63965"	118 29'55.76829"	1228.309	40	<9						
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color		Weathering		Jointing				
Basalt	Tba	Medium Grey (N5)		Slight		Highly Fractured to Moderate				
Quality			Hardness	lbs./cu ft.	Reserve (cy)		Reserve (Tons)			
Fair			R3-	155	100,000		150,000			
Potentially Significant Site	Why		Open/Closed	Direction						
No	NA		Closed	Approximately 1300 meters east is South Beede Reservoir						
Adjacent Land Use										
Open Space										
Remarks										
Highway 20 bisects the ground at this location. The rock here is a fine-grain, vesicular basalt of marginal quality. The terrain is flat to gradual with no screening and ample room to work. It appears that this site and rock are used by Maintenance for sanding purposes. There is minor rip-rap at this location. Part of the site is used for waste rock.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



View of the site looking northeast.

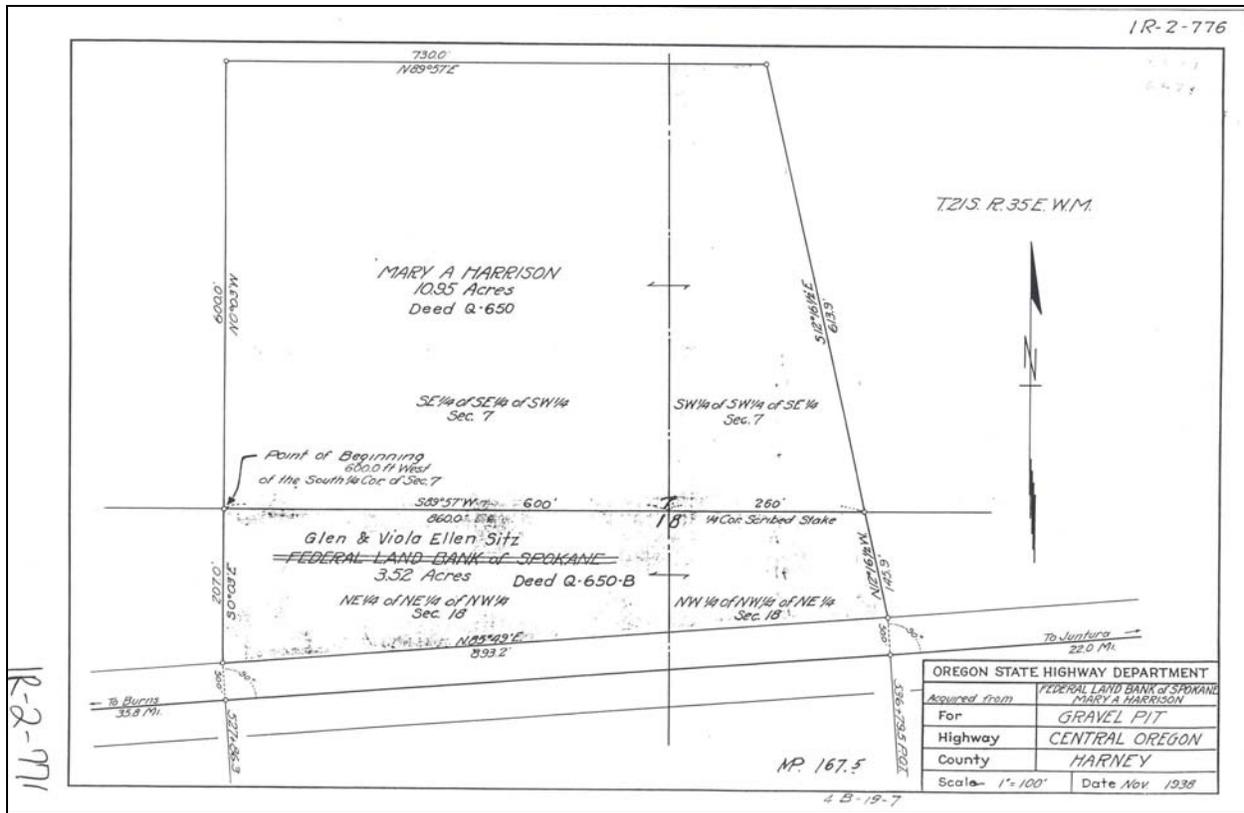


Close-up view of the basalt found at this site.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Harney					14	0007	167.3	21S	35.0E	07
File ID		Source #	Date Visited	Map #			Type of Site			
Q0650		13-018-5	08/14/2001	1R-2-776			Borrow			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
43 45'17.14000"	118 27'38.69000"	1104	14.47	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)				
Unknown			NA	120						
Potentially Significant Site	Why			Open/Closed	Direction					
No	Too Small			Closed	Adjacent to a wetland area					
Adjacent Land Use										
Farming										
Remarks										
This site is located north of and adjacent to Highway 20. There is no access to this ground and we have been fenced out. It appears that Maintenance has dumped waste rock here some time in the past. The ground is flat with no screening. The water table is very close to or at the surface at this site. Wetland potential.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



View of the borrow site adjacent to Highway 20.



Aerial view of the site located adjacent to Highway 20 and a landing strip.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Harney					14	0005	46.7	20S	32.0E	06
File ID		Source #	Date Visited		Map #			Type of Site		
13017		13-020-5	05/23/2001		1R-2-1637			Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
43 52'17.81103"	118 55'37.79987"	1463.447	26.4	<9						
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color		Weathering			Jointing			
Porphyritic Andesite	Tts/Tat	Medium Grey (N5)		Slight to Moderate			Highly Fractured			
Quality				Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Fair				R2+	150	95,000	192,375			
Potentially Significant Site	Why			Open/Closed	Direction					
Maybe	Only site along this stretch of road.			Closed						
Adjacent Land Use										
Ranch to the east approximately 800 meters/ Open Space										
Remarks										
This site is located adjacent to and west of Highway 395. The rock here is a medium-grain porphyritic andesite. A lot of the plagioclase are going to clays and the rock can be soft and may produce a lot of fines. Some of the rock exposed is very hard and competent. There is room to work with some screening. The terrain is moderate (12 degrees). The dominant fracture pattern is very platy so you can rip the material. Part of the ground is a stock pile/ waste rock site.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.413	2.492	15.8	9.0	5.0	8.8	15.2	11.2	20.3		
Material Use										
Quarry Rock (1998)										

SW

NE



View of the quarry site located west of Highway 395.



Close-up view of the quarry wall, notice the fracture pattern.



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

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Harney				14	0440	23.40	26S	30.0E	36
File ID		Source #	Date Visited	Map #			Type of Site		
31080		13-035-5	05/17/2001	1R-5-1386			Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
43 15'55.10895"	118 57'21.20977"	1258.339	40	NA					
Comments									
GPS acquired on site.									
Rock Type	Unit	Color		Weathering			Jointing		
Basalt	QTb	Medium Grey (N5)		Slight			Massive		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Poor to Fair			R3	150					
Potentially Significant Site	Why	Open/Closed		Direction					
No	USA Ground	Closed		Mud Lake is to the west approximately 400 meters.					
Adjacent Land Use									
Open Space									
Remarks									
This site is adjacent to the east and west of Highway 205. The lions share of the ground would be a borrow site with 90% sand/silt and 10% volcanic gravel. The basalt exposures appear to be thin lava flows. The rock is a fine-grain, massive basalt/ basaltic andesite. Some of the material is poor quality. There is ample room to work with no screening from the highway. You will need to drill and blast. The terrain is fairly flat. The volcanic gravel is small pebble size.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

W

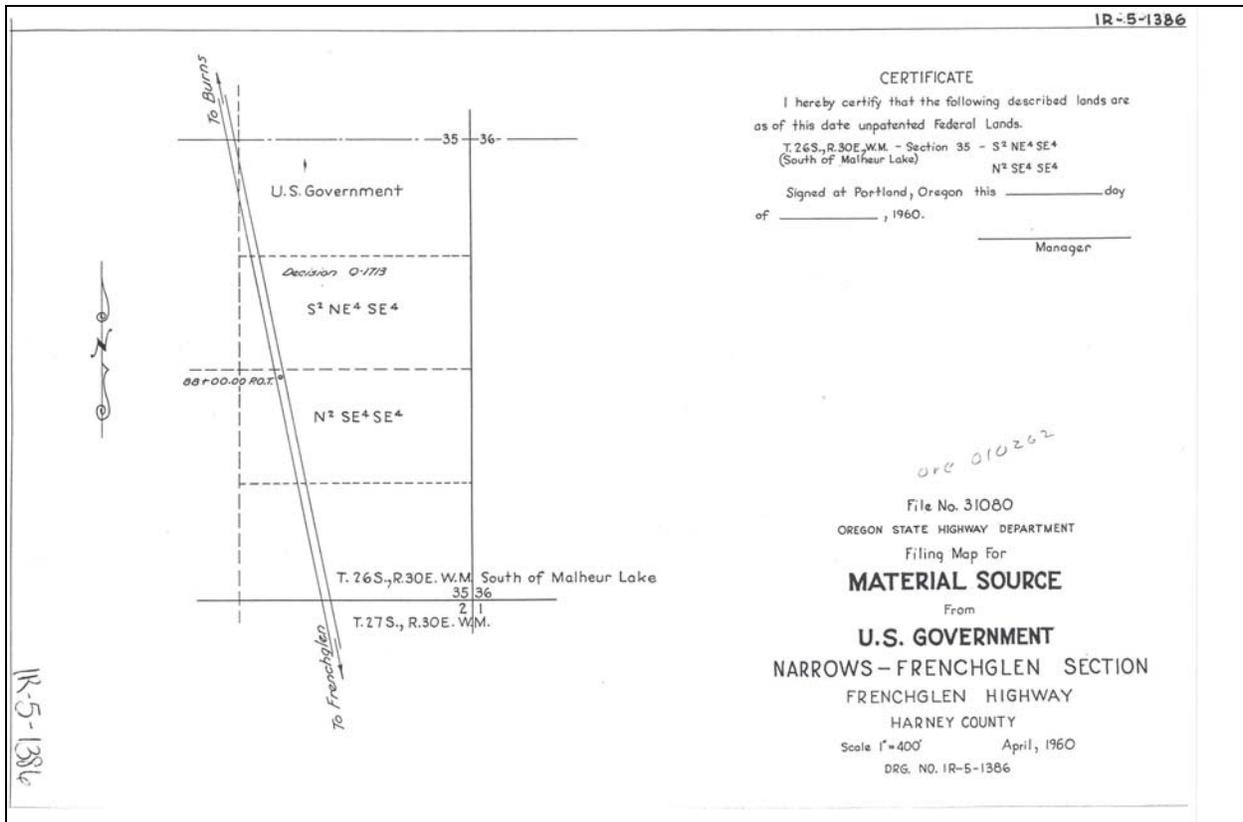
SE



View of the quarry site on either side of Highway 205.



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



Aerial view of the quarry site on either side of Highway 205.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Harney	Church Quarry2				14	0440	23.93	27S	30.0E	01
File ID		Source #	Date Visited	Map #		Type of Site				
06274, 30900		13-036-5	05/17/2001	1R-2-669, 1R-5-1365		Borrow				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
43 15'31.50000"	118 57'00.00000"	1276	17.6	<15						
Comments										
GPS acquired on site.										
Rock Type	Unit	Color	Weathering		Jointing					
Gravel	Qs	NA	NA		NA					
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair to Poor			NA	155	160,000	334,800				
Potentially Significant Site	Why	Open/Closed	Direction							
No	NA	Closed	Mud Lake is to the west approximately 800 meters							
Adjacent Land Use										
Open Space/ Ranching										
Remarks										
This site is east of Highway 205 about 300 meters. The material is composed of Calcium Carbonate (CaCO ₃) prismodal gravel 30% and 70% silt. There is ample room to work with no screening. The terrain is flat. Dominant size gravel is pebble.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
		24.7								
Material Use										
(1985)										

SW

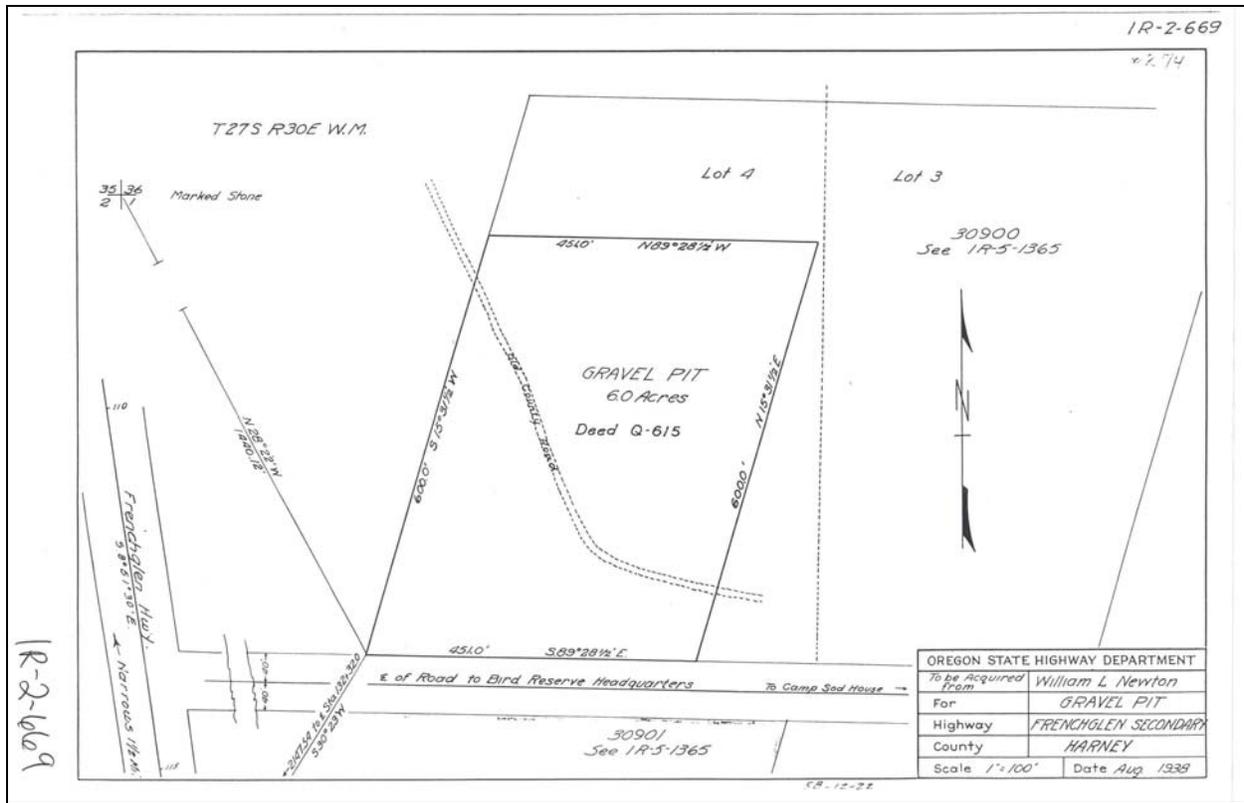
E



View of the borrow site looking northwest.

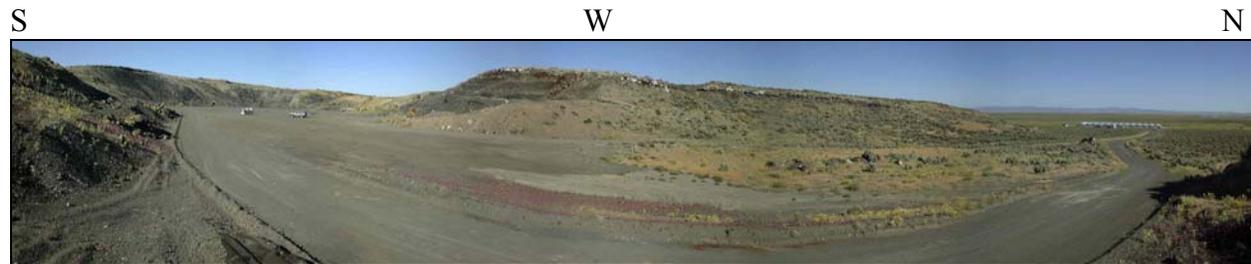


Close-up view of the gravel at the site.



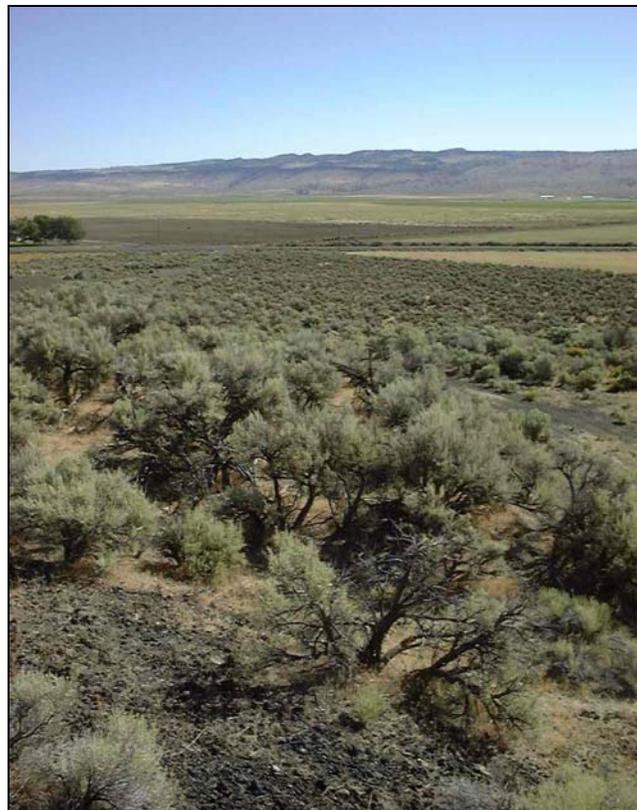
Aerial view of the site adjacent to Highway 395.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Harney				14	0442	24.6	24S	33.0E	33
File ID		Source #	Date Visited	Map #			Type of Site		
15274, 15280		13-045-5	08/02/2001	1R-2-1879			Cinder Pit		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
43 26'02.83123"	118 39'07.33538"	1291.254	29.3	<10					
Comments									
GPS acquired in the pit.									
Rock Type	Unit	Color		Weathering			Jointing		
Cinder	QTp	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Good			NA	120	1,400,000	2,268,000			
Potentially Significant Site	Why		Open/Closed	Direction					
Yes	Large site for sanding materials		Closed	Malheur Refuge is to the south approximately 2.5 miles					
Adjacent Land Use									
Farming									
Remarks									
This site is located 300 meters south of Highway 78. The material at this location is cinder of various sizes.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

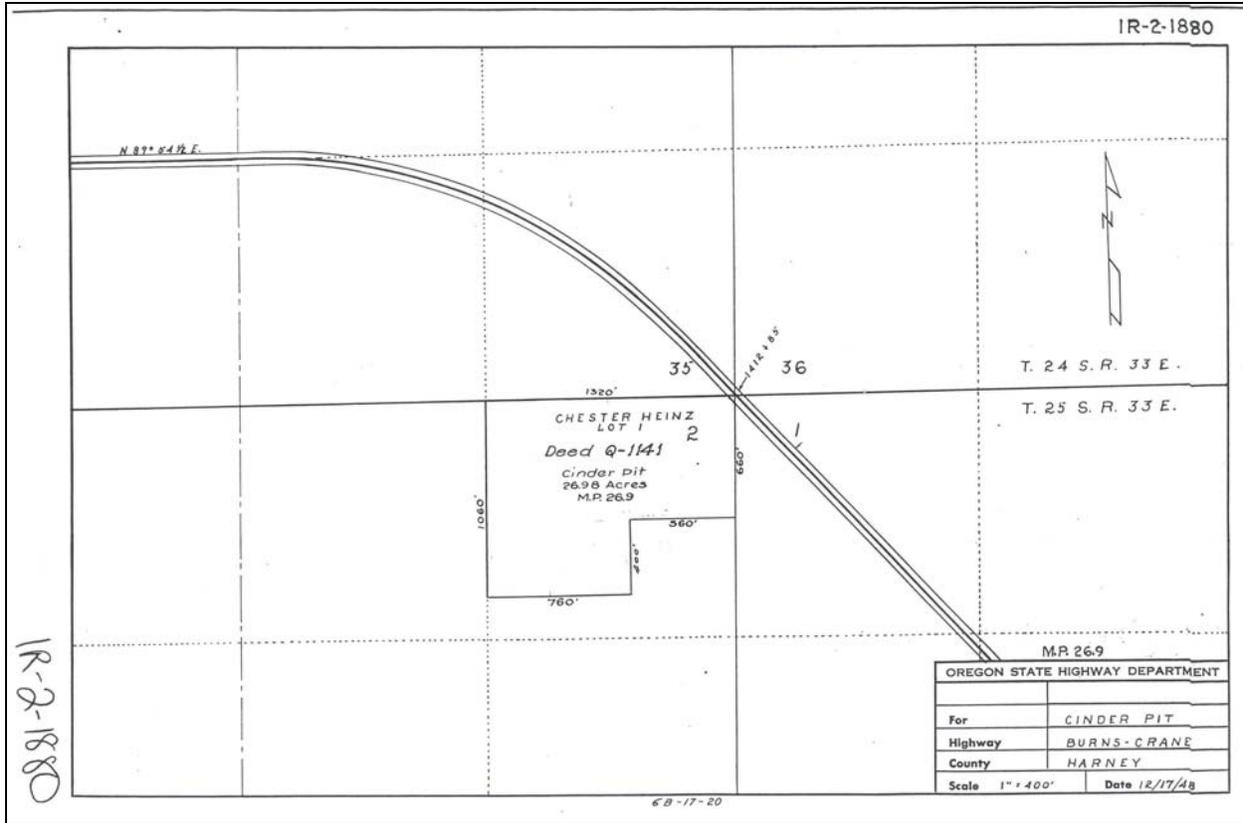


View of the cinder pit looking west.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Harney					14	0442	26.78	25S	33.0E	02
File ID		Source #	Date Visited	Map #			Type of Site			
15279		13-046-5	08/03/2001	1R-2-1880			Cinder Pit			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
43 26'05.32000"	118 36'45.85000"	1260	10	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
Cinder	QTp	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair			NA	120						
Potentially Significant Site	Why			Open/Closed	Direction					
No	Too Small			NA	NA					
Adjacent Land Use										
Ranching										
Remarks										
This site is located west of Highway 78 approximately 250 meters. This is a small piece of ground with no disturbance. We have sold the surrounding ground that has the pits on them. There is no access to the ground and it would need to be developed.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
	2.22				12.6	0.5				
Material Use										
Rip Rap (1984)										



View looking northeast at the cinder pit site near Highway 78.

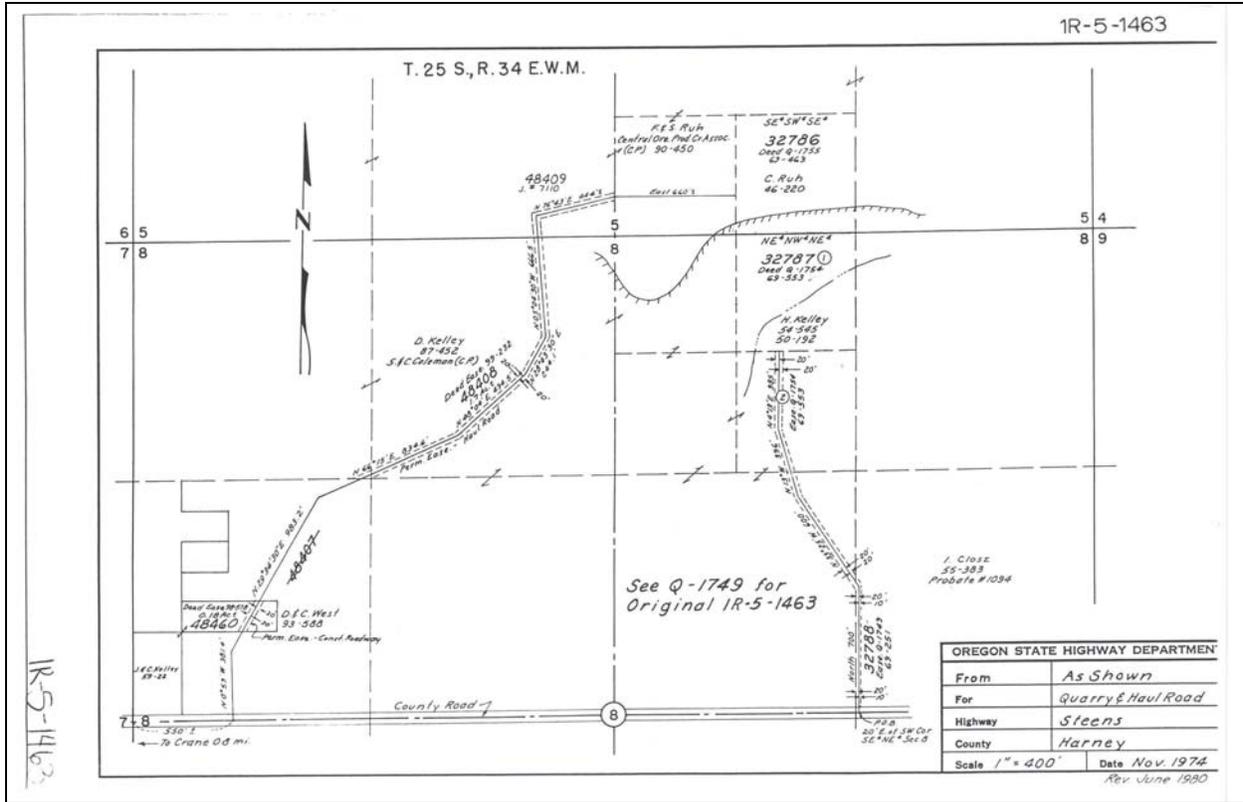


Aerial view of the cinder site near Highway 78.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Harney	Crane Quarry				14	0442	28.23	25S	34.0E	05
File ID		Source #	Date Visited	Map #		Type of Site				
32787, 32786, 32788		13-047-5	08/03/2001	1R-5-1463		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
43 25'16.83000"	118 33'21.41000"	1339	20	<1						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
Basalt	Tba	NA		NA			Massive			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair to Good			R3-	160	180,000	388,800				
Potentially Significant Site	Why			Open/Closed	Direction					
No	Too Small			Closed	NA					
Adjacent Land Use										
Farming										
Remarks										
This site is located approximately 700 meters north of the county road that goes through Crane, OR. The site has lost its access and will need to be developed for further use. The material is a fine-grain, massive basalt that forms the rim rocks in this area. The terrain is flat on top with some screening. You will need to drill and blast the rock. The adjacent land owner would sell his rock for future projects. The rock is too blocky to crush economically.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
	2.83	15.3	1.9	0.4			17.6	0.6		
Material Use										
(1974)										



View from the county road looking towards the quarry site.



Aerial view of the town of Crane and the quarry site off of the county road.

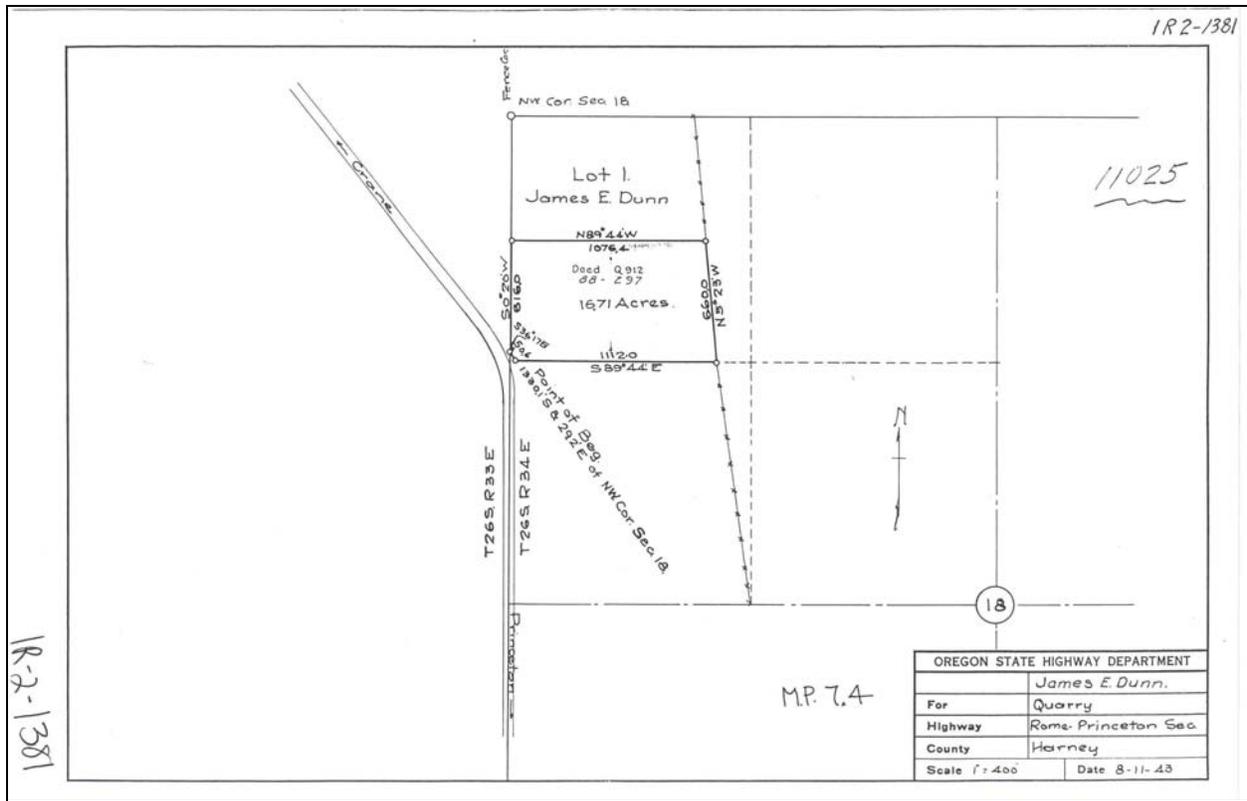
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Harney	New Princeton				14	0442	35.15	26S	34.0E	18
File ID		Source #	Date Visited	Map #			Type of Site			
11025		13-048-5	08/14/2001	1R-2-1381			Cinder Pit			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
43 19'01.41000"	118 34'48.66000"	1280	16.71	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
Cinder	Tbp	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good			NA	120	100,000	150,000				
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	NA					
Adjacent Land Use										
Farming										
Remarks										
This site is east of Highway 78 about 30 meters. This is a cinder site with no defined access from the highway over private ground. I did not cross over to our site.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

NE

E



View of the cinder pit site with vehicles parked at the access point.



Aerial view of the cinder pit site off of Highway 78, arrow points to the access road.

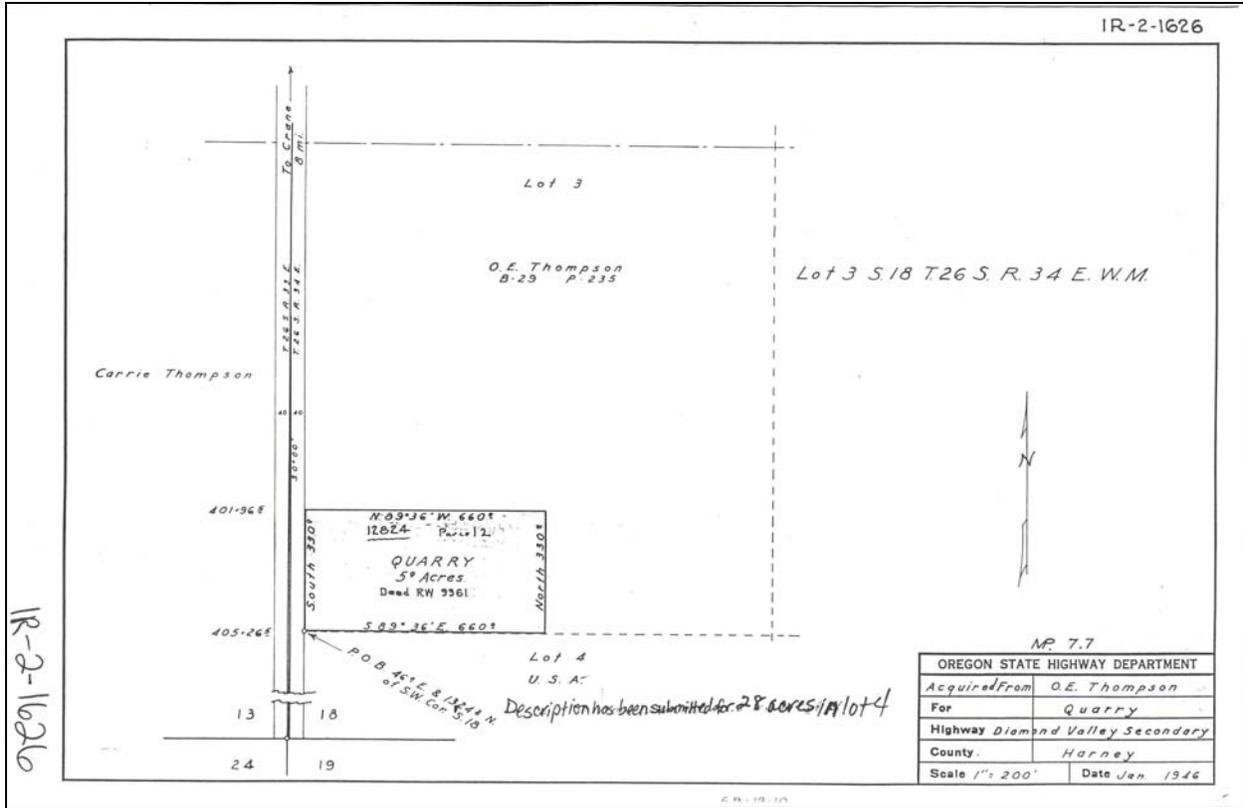
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Harney				14	0442	35.92	26S	34.0E	18
File ID		Source #	Date Visited	Map #			Type of Site		
12824		13-049-5	08/03/2001	1R-2-1626			Cinder Pit		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #				
43 18'33.30000"	118 34'55.29000"	1280	5	<1					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
Cinder	Tbp	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Fair			NA	120					
Potentially Significant Site	Why			Open/Closed	Direction				
No	Too Small			Closed	NA				
Adjacent Land Use									
Farming/Ranching									
Remarks									
This small site is east of and adjacent to Highway 78. The material is composed of volcanic cinder. The terrain is steep with no room to work and no screening from the highway. BLM owned									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

NE

SW



View of the cinder pit site along Highway 78.



Aerial view of the cinder pit site located near Crane, OR and adjacent to Highway 78.

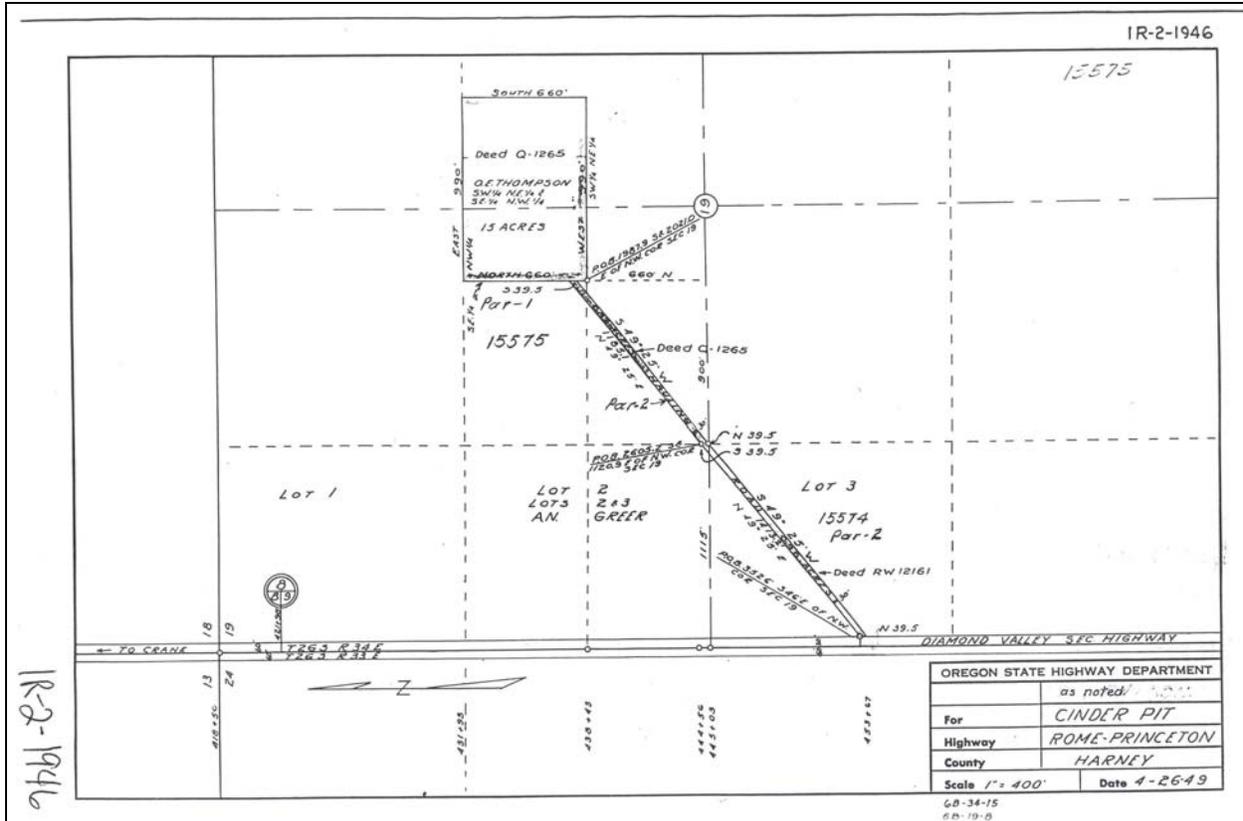
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Harney				14	0442	36.87	26S	34.0E	19
File ID		Source #	Date Visited	Map #			Type of Site		
15574, 15575		13-050-5	08/03/2001	1R-2-1946			Cinder Pit		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
43 18'04.14000"	118 34'26.53000"	1280	15	NA					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
Cinder	Tbp	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Fair			NA	120	300,000	486,000			
Potentially Significant Site	Why			Open/Closed	Direction				
No	Too Small			Closed	NA				
Adjacent Land Use									
Ranching/Residences									
Remarks									
This site is east of Highway 78 about 700 meters. The material is composed of cinder. The access would need to be developed if we wish to use this site. Private residences close by. There is limited room to work and no screening from the highway.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

N

E



View of the cinder pit site looking northeast from Highway 78.

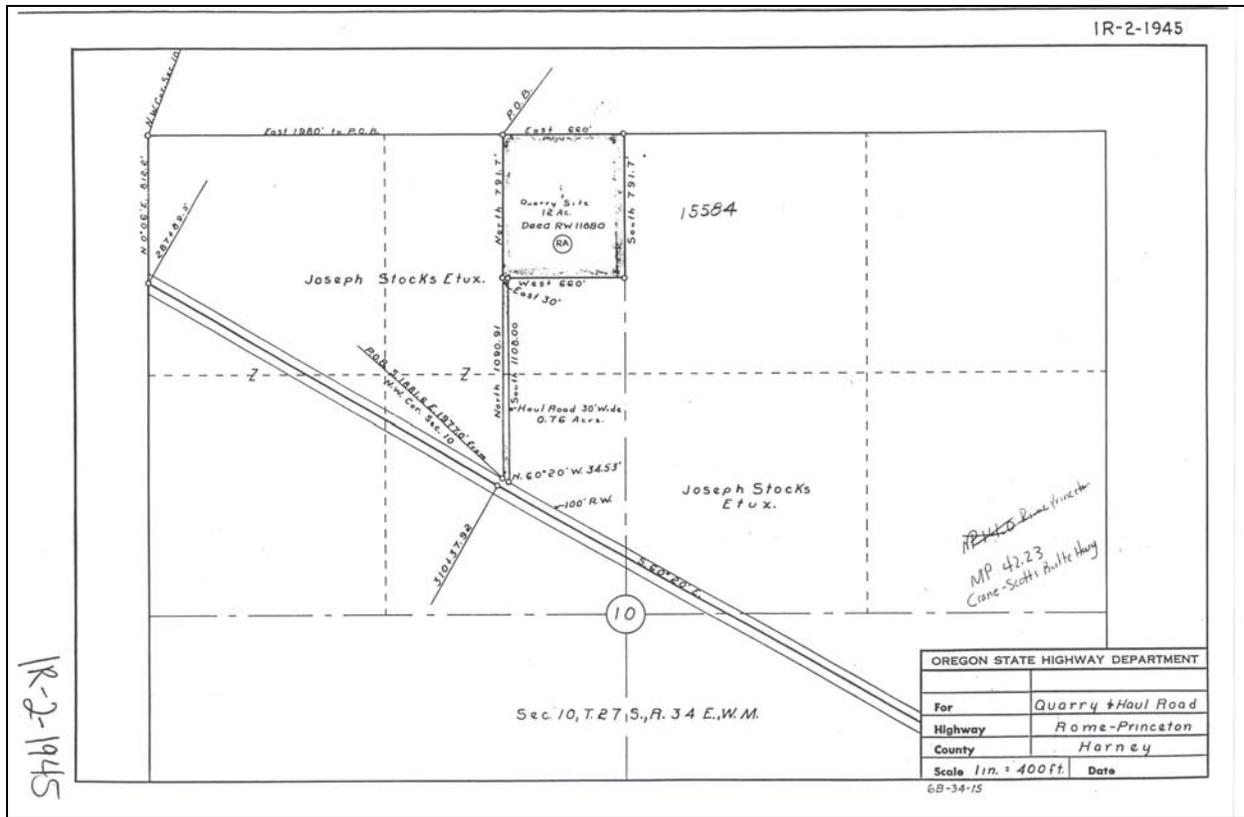


Aerial view of the cinder pit site near Highway 78.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Harney					14	0442	42.2	27S	34.0E	10
File ID		Source #	Date Visited	Map #			Type of Site			
15584		13-051-5	08/03/2001	1R-2-1945			Quarry			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
43 14'47.06000"	118 30'57.11000"	1306	12.76	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
Rhyolite	Tns	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair to Poor			NA	120						
Potentially Significant Site	Why			Open/Closed	Direction					
No	Too Small			Closed	NA					
Adjacent Land Use										
Ranching										
Remarks										
This site is north of Highway 78 approximately 500 meters. The material is composed of rhyolite. The terrain is quite steep (40 degrees). There are multiple cat cuts at this location. There is limited room to work with no screening from the highway. Small acreage.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



A longshot view of the quarry site.

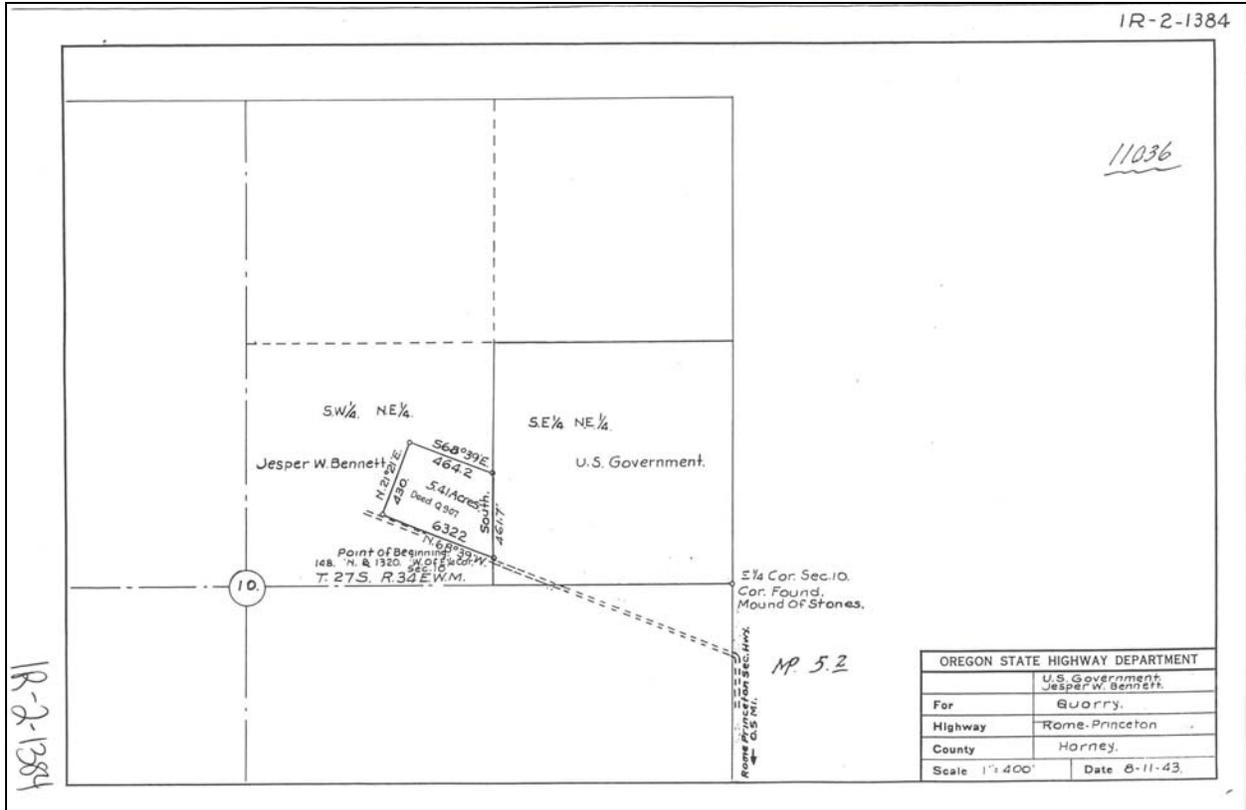


Aerial view of the quarry site located north of Highway 78.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Harney					14	0442	42.91	27S	34.0E	10
File ID		Source #	Date Visited	Map #			Type of Site			
11036		13-052-5	08/03/2001	1R-2-1384			Borrow			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
43 14'27.98000"	118 30'36.16000"	1282	5.41	<1						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
Rhyolite	Trs	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Poor to Fair			NA	120						
Potentially Significant Site	Why			Open/Closed	Direction					
No	Too Small			Closed	NA					
Adjacent Land Use										
Open Space/Ranching										
Remarks										
This site is located north of Highway 78 about 200 meters. This is a small site at the base of a steep slope. The material is rhyolite of poor quality. There is room to work and no screening from the highway.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



View of the small borrow site at the base of this steep slope.

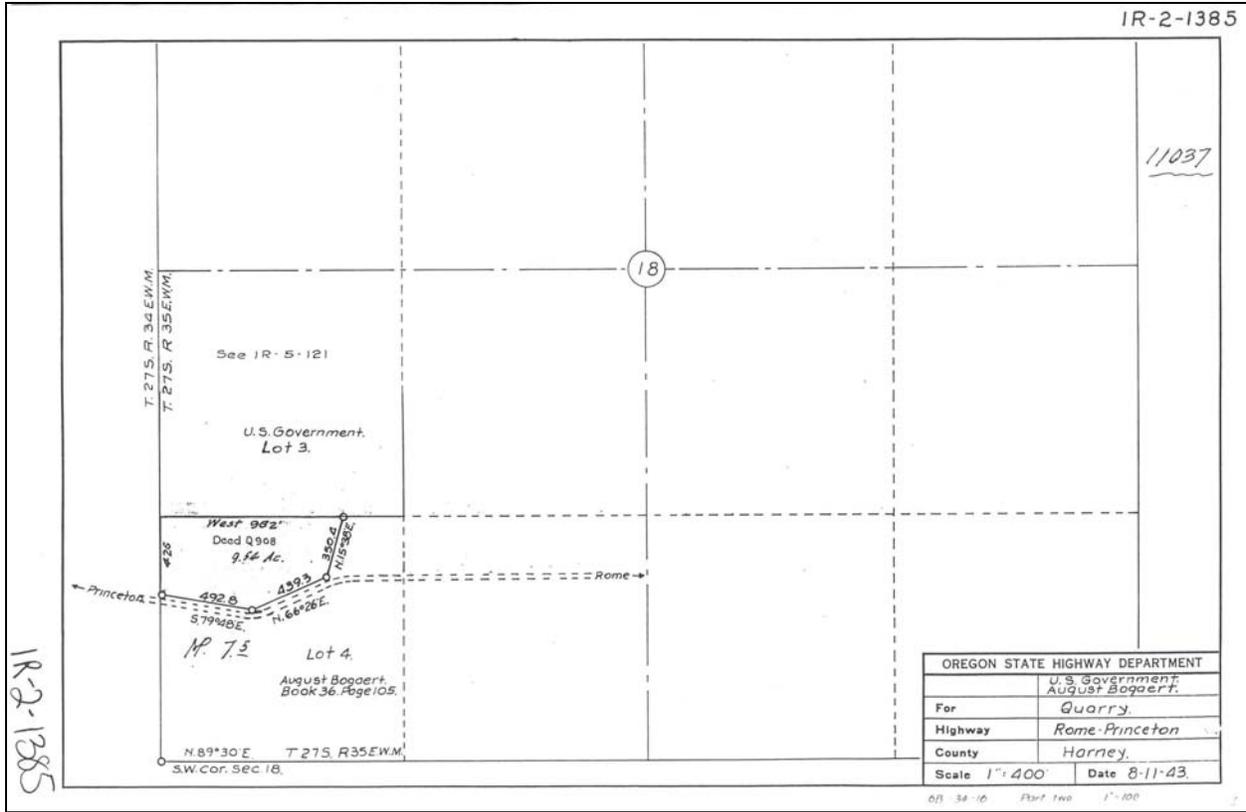


Aerial view of the borrow site located north of Highway 78.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Harney					14	0442	42.25	27S	35.0E	18
File ID		Source #	Date Visited	Map #			Type of Site			
11037		13-053-5	08/03/2001	1R-2-1385			Cinder Pit			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
43 13'17.44622"	118 27'44.12682"	1295.888	9.54	<7						
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color		Weathering			Jointing			
Cinder	Tbp	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good			NA	120	215,000	348,300				
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	NA					
Adjacent Land Use										
Ranching/Open Space										
Remarks										
This site is located north of and adjacent to Highway 78. This is a good clean source of cinder along this section of road.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



View of the cinder pit site located north of Highway 78.



Aerial view of the 9.54 acre cinder pit site.

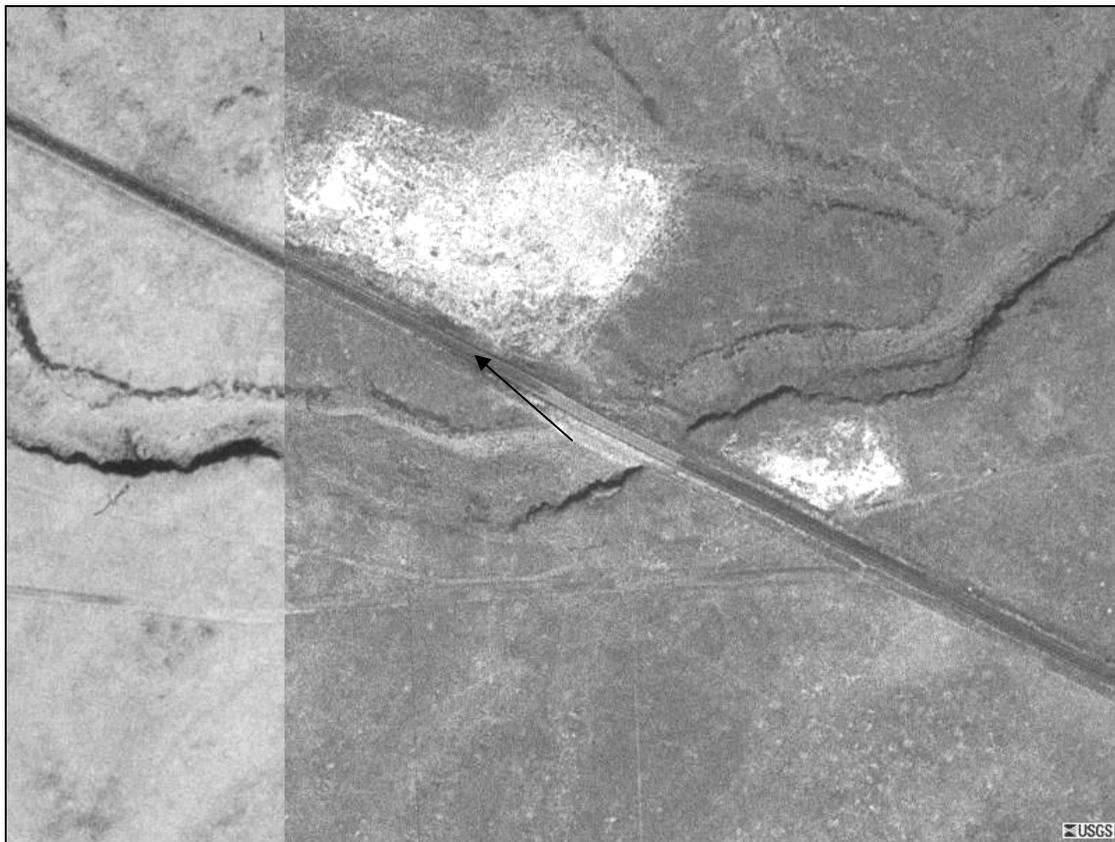
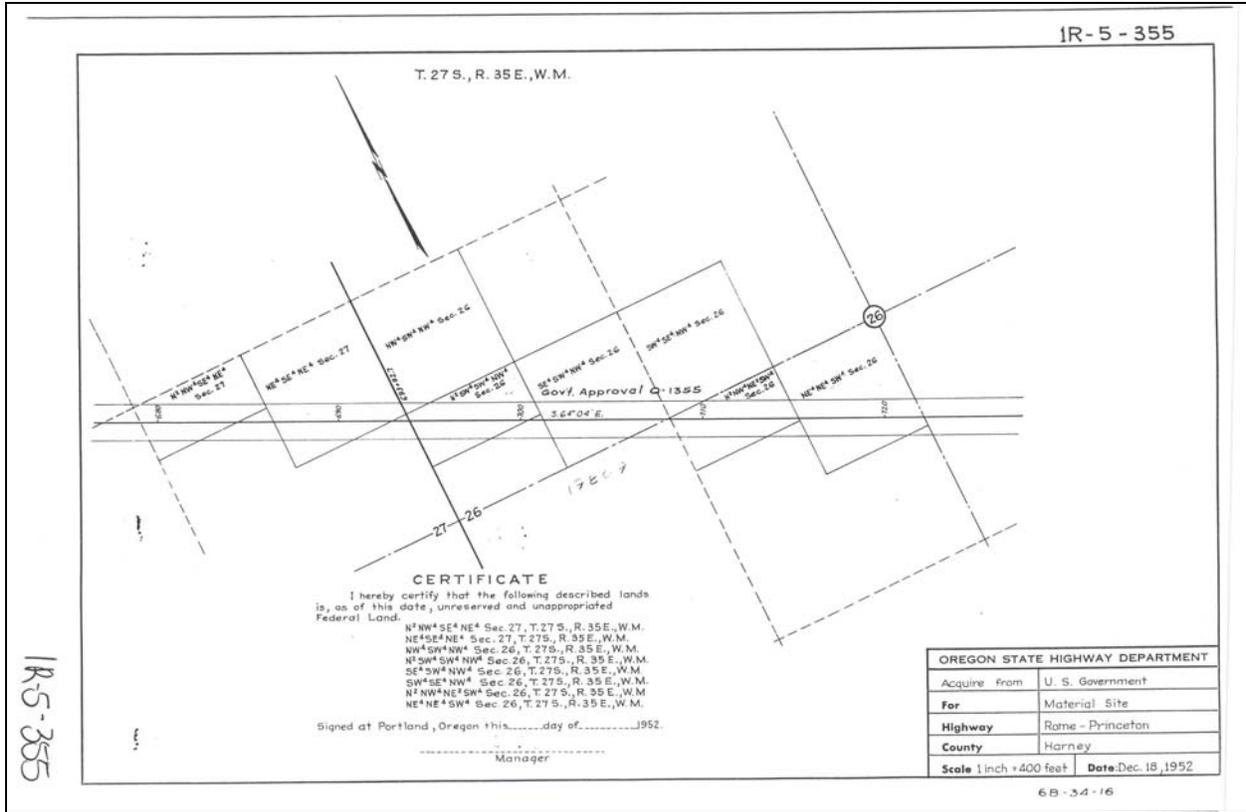
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Harney				14	0442	49.5	27S	35.0E	26
File ID		Source #	Date Visited	Map #			Type of Site		
19809		13-054-5	08/03/2001	1R-5-355			Raw Land		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
43 11'49.29000"	118 22'57.08000"	1260	65	NA					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
Basalt	Qb	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Fair to Good			NA	150	800,000	1,620,000			
Potentially Significant Site	Why			Open/Closed	Direction				
No	USA Ground			Closed	NA				
Adjacent Land Use									
Open Space									
Remarks									
Highway 78 bisects this ground. This is raw land with no prior disturbance. There is a recent lava flow here with overburden up to 6 feet deep. The terrain is flat with no screening from the highway. The basalt flow is about 25 feet thick. There are good exposures where the old channel of the South Fork of the Malheur River cut through in the past.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

W

NE



View of the raw land site on either side of Highway 78.



Aerial view of the raw land site bisected by Highway 78.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Harney					14	0442	51.1	27S	35.0E	25
File ID		Source #	Date Visited	Map #		Type of Site				
17430, 17430B		13-055-5	08/01/2001	1R-5-119		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #				
43 11'38.35451"	118 20'58.97663"	1280.177	160	<4						
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color		Weathering			Jointing			
Rhyolite	Tvs	Light Grey (N7)		Fresh			Highly Fractured to Massive			
Quality			Hardness	lbs./cu ft.		Reserve (cy)	Reserve (Tons)			
Poor to Fair			R2-	145		1,100,000	2,153,250			
Potentially Significant Site	Why			Open/Closed		Direction				
No	USA Ground			Closed		NA				
Adjacent Land Use										
Open Space										
Remarks										
This site is located north of Highway 78 approximately 800 meters. The rock here is a fine-grain, highly fractured rhyolite. You can rip the material. The terrain is moderate (18 degrees) with ample room to work and no screening. All work should proceed from the top down and from the backside of the hill in the future. Minor rip rap of unknown quality.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
		11.2								
Material Use										
SANDING (1988)										

W

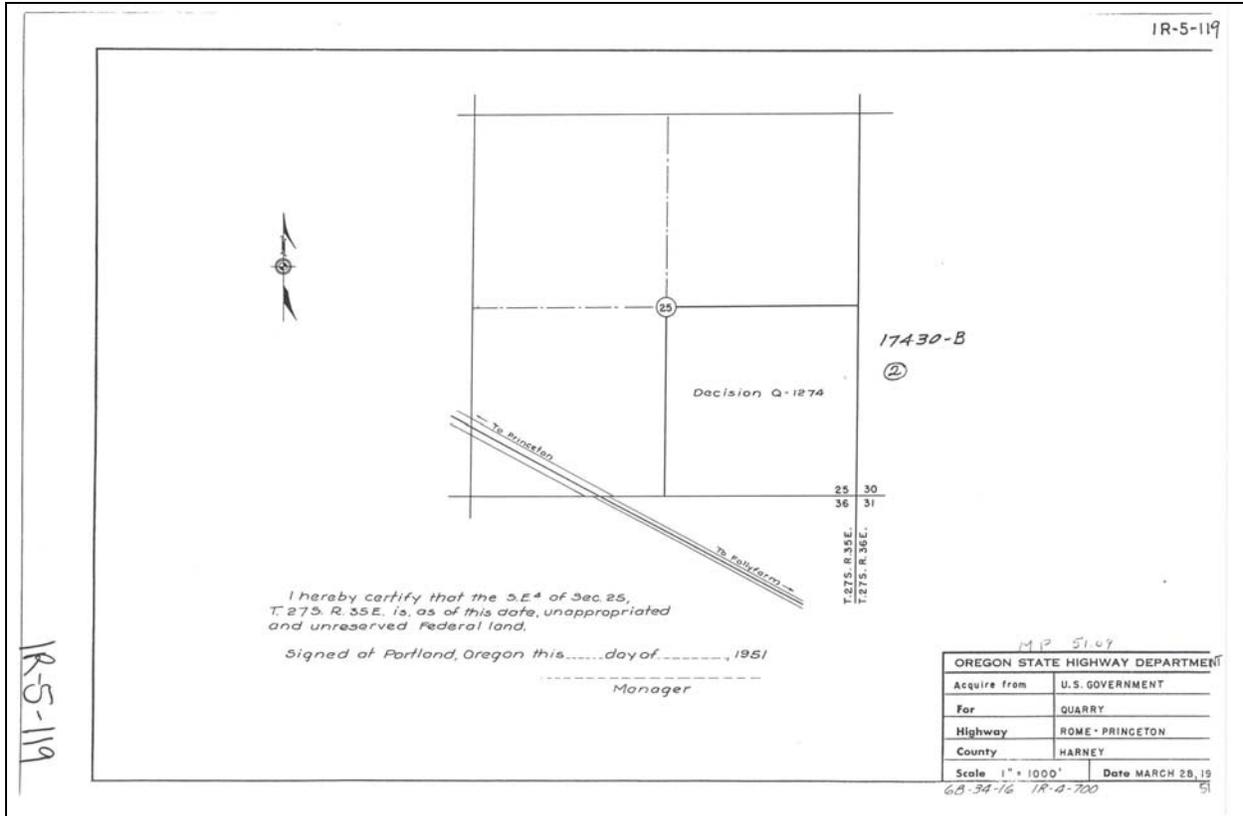
S



View looking at the quarry site located north of Highway 78.



Close-up view of the quarry wall and the rocks that comprise the site.



Aerial view of the 160 acre quarry site.

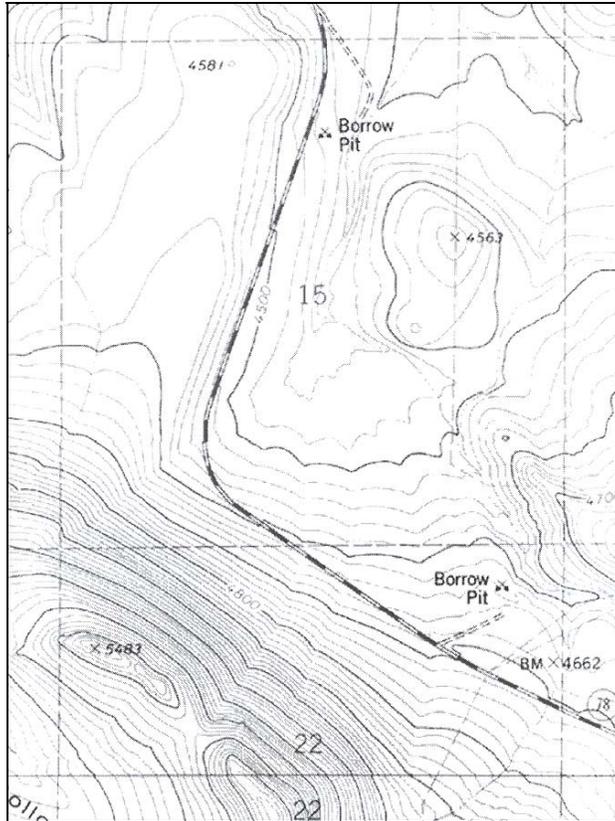
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Harney					14	0442	56.4	28S	36.0e	22
File ID		Source #	Date Visited	Map #		Type of Site				
17430		13-057-5	08/01/2001	1R-5-118		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
43 07'47.81054"	118 16'10.45156"	1426.785	40	<2						
Comments										
GPS acquired in the pit										
Rock Type	Unit	Color		Weathering			Jointing			
Basalt	Tba	Medium Grey (N5)		Fresh			Highly Fractured			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair to Good			R3	165	400,000	600,000				
Potentially Significant Site	Why			Open/Closed	Direction					
No	USA Ground			Closed	NA					
Adjacent Land Use										
Open Space										
Remarks										
This site is located near the summit on Highway 78. The ground is north of and adjacent to the highway. There is no map or source number for this new piece of ground. The rock here is a very platy, somewhat brittle, basalt. You can rip the rock quite easily. There is room to work with no screening.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



View of the quarry site near the summit of Highway 78.



Close-up view of the platy basalt at this location.



Aerial view of the quarry site located adjacent to Highway 78.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Harney				14	0442	0	27S	36.0E	31
File ID		Source #	Date Visited	Map #			Type of Site		
42571		13-908-5	08/01/2001	1R-3-1440			Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
43 10'38.06000"	118 19'44.56000"	1280	25	NA					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
Rhyolite	Tvs	White		Slight			Highly Fractured		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Poor			R2-	100	300,000	405,000			
Potentially Significant Site	Why			Open/Closed	Direction				
No	USA Ground			Closed	NA				
Adjacent Land Use									
Open Space									
Remarks									
This site is located south of and adjacent to Highway 78. There is a very small disturbance at this location to expose the rhyolite float. The terrain is flat to moderate (20 degrees) with room to work and no screening.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

S

NW



View looking west at the quarry site located south of Highway 78.



Close-up view of the material at this site.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur					14	0006	356	15S	45.0E	22
File ID		Source #	Date Visited	Map #			Type of Site			
27500		23-002-5	06/07/2001	1R-5-1086, 1R-2-1399, 1R-5-1096			Quarry			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
44 15'05.07906"	117 11'29.41166"	678.721	70	<1						
Comments										
GPS acquired in the pit.										
Rock Type		Unit	Color	Weathering			Jointing			
Igneous/Metamorphic Gravel		Ts/Tob	NA	Fresh to Decomposing			Massive to Highly Fractured			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair			R0 to R3+	166	800,000	1,792,800				
Potentially Significant Site	Why			Open/Closed	Direction					
No	USA Ground			Closed	NA					
Adjacent Land Use										
Open Space										
Remarks										
This site is located south of I-84 and Highway 201 about 0.5 miles. The material here is a mix of igneous and metamorphic rock. You can rip the material but will obtain large blocks of rip rap. There are multiple zones of poor quality aggregate throughout. There is ample room to work with good screening. This site is adjacent to a high pressure natural gas line. The terrain is moderate (5 to 15 degrees) and should pose no problems. This is BLM ground.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
	2.71			0.7						
Material Use										
Rip Rap (1988)										

NW

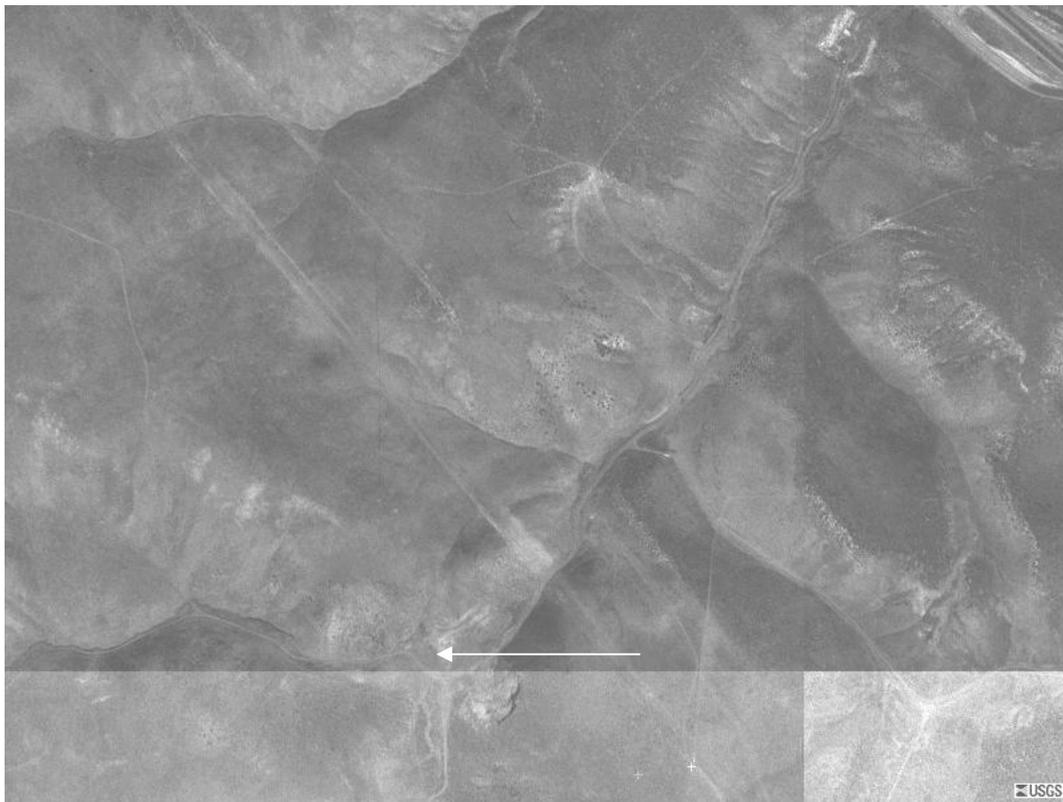
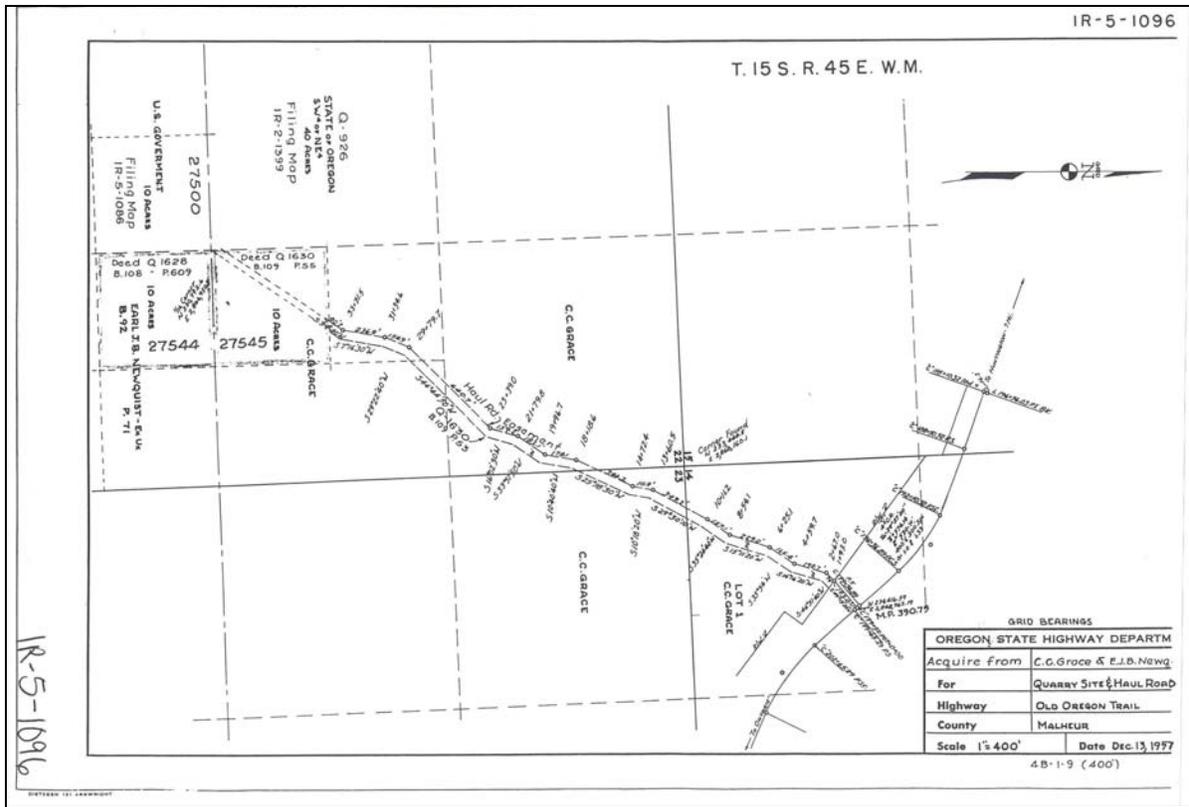
SW



View of the quarry site located south of I-84 and Highway 201.



Close-up view of the rock found at the site



Aerial view of the quarry site located south of I-84, which is in the upper right corner of the image.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur				14	0006	358.9	16S	45.0E	01
File ID		Source #	Date Visited	Map #			Type of Site		
24238		23-004-5	06/07/2001	1R-5-833			Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #				
44 12'42.40000"	117 09'34.83000"	959	50	<2					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color	Weathering			Jointing			
Sandstone	Ts	NA	NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Poor			NA	120	1,000,000	1,620,000			
Potentially Significant Site	Why			Open/Closed	Direction				
No	USA Ground			Closed	NA				
Adjacent Land Use									
Open Space									
Remarks									
This site is located west of I-84 about 300 meters. The pit is located at the top of the hill, with access on a four-wheel drive steep path. The material is a decomposing sandstone that would be used as a sanding rock. There is ample room to work with limited screening. The access would need to be developed if we wish to use this site. Care should be used not to include the adjacent tufts for sanding material. BLM owned.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									



View looking towards the north at the quarry site located about 300 meters west of I-84.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur	Fenicottero Gravel Pit				14	0006	371	17S	47.0E	20
File ID		Source #	Date Visited	Map #		Type of Site				
23880, 22153, 23879		23-005-5	06/07/2001	1R-5-783		Gravel				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
44 04'22.78000"	117 00'04.92000"	684	21.78	<7						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color	Weathering		Jointing					
Igneous/Metamorphic Gravel	QTg	NA	NA		NA					
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good			NA	120	50,000	75,000				
Potentially Significant Site	Why			Open/Closed	Direction					
No	Limited quantity			Closed	Adjacent to the east is a creek					
Adjacent Land Use										
Rural Residential										
Remarks										
This site is adjacent to and east of I-84. The ground is being used as a stockpile site and bone-yard. The material is composed of cobble size and less gravel (70%) and silt (30%). There is limited screening with room to work. The terrain is flat. The pit can be lowered another 15 feet. Residences to the east approximately 300 meters.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

SE

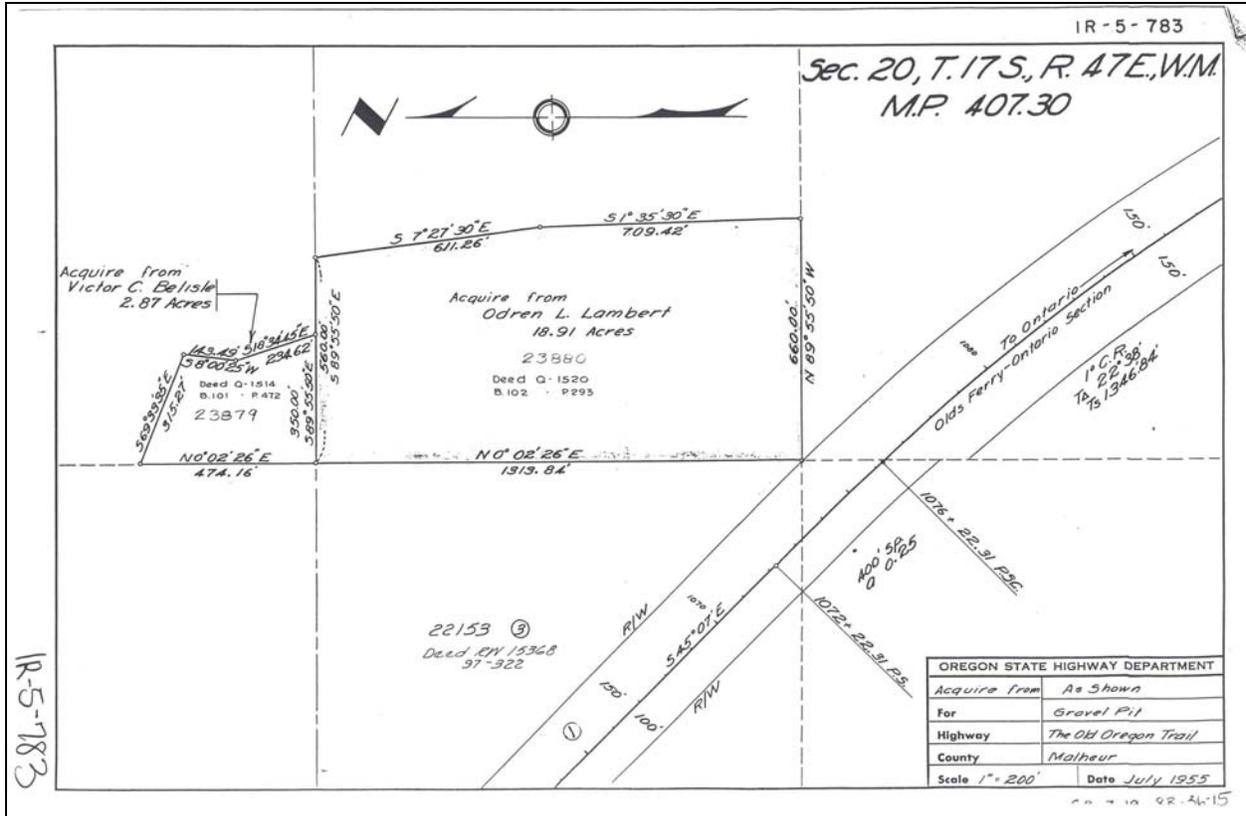
N



View of the gravel site, adjacent to the east of I-84, being used as a stock pile site and bone yard.



Close-up view of the aggregate found at this gravel site.



Aerial view of the gravel site located east of I-84.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur	Brogan Hill			14	0005	245.9	15S	41.0E	11
File ID		Source #	Date Visited	Map #		Type of Site			
Q0996, Q0747, 08441, 08441A, 49421		23-007-5	06/06/2001	1R-1-509		Quarry			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #				
44 16'34.47852"	117 39'26.49708"	1205.898	15.78	<3	23-0126				
Comments									
GPS acquired in the pit.									
Rock Type	Unit	Color		Weathering		Jointing			
Basalt	Tba	Dark Grey (N3)		Slight to Decomposing		Highly Fractured			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Very Good to Fair			R3+	191	100,000	150,000			
Potentially Significant Site	Why			Open/Closed	Direction				
Yes	Good rock and adjacent to the summit.			Closed	NA				
Adjacent Land Use									
Open Space									
Remarks									
This site is located adjacent to and south of Highway 26. The rock here is a highly fractured, fine-grain basalt. You can rip the material and acquire good size pieces to crush. There is ample room to work with limited screening from the highway. There can be up to 15 feet of overburden as you move south at this location. The terrain is fairly flat up here near the summit. Approximately 135,000 cubic yards have been removed									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
2.89	2.87	14.5	4.0	1.7			7.7	0.2	
Material Use									
AC (1993)									

NW

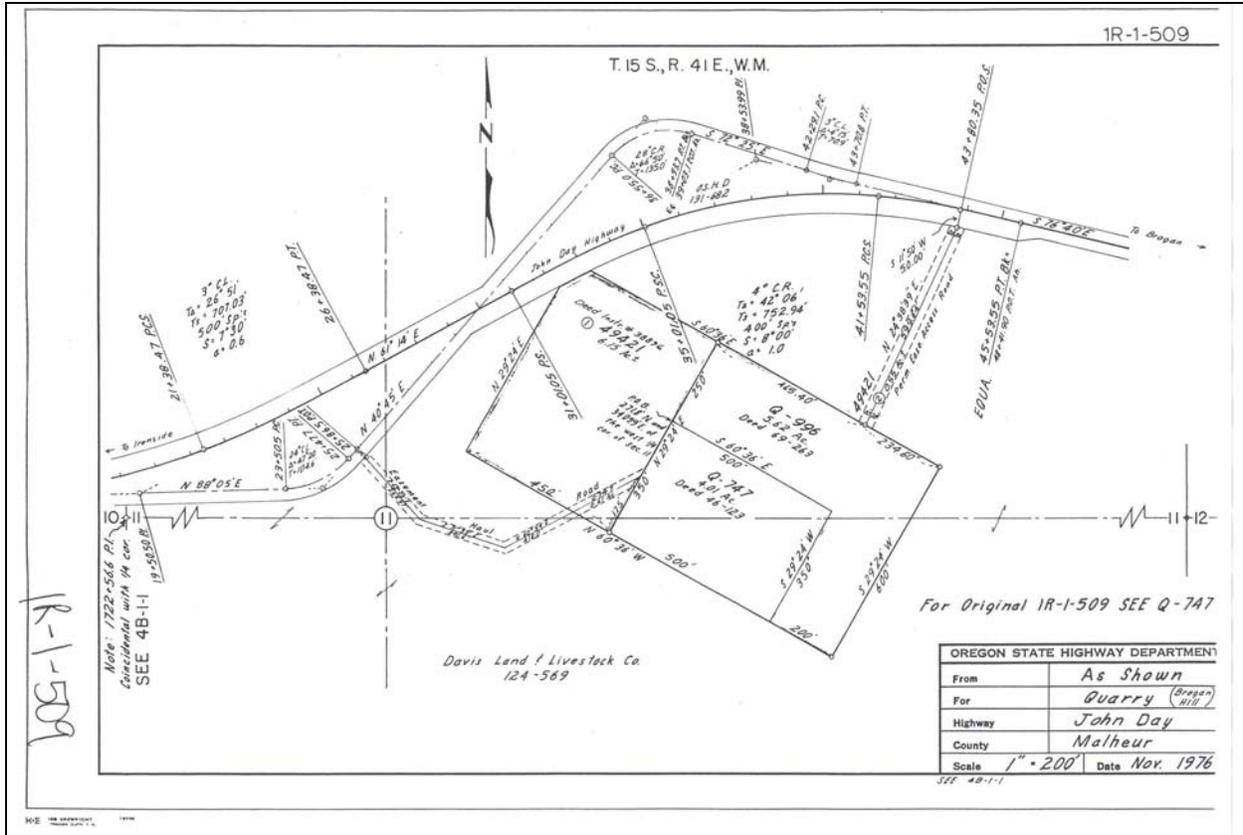
W



View looking south of the quarry located adjacent to and south of Highway 26.



Close-up view of the rock at the quarry, note the hammer for scale.



DOGAMI aerial view of the quarry site adjacent to and south of Highway 26.

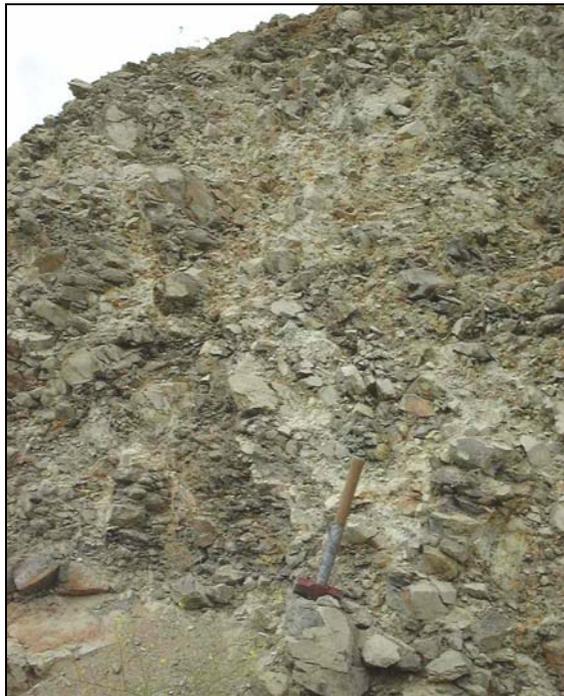
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur					14	0005	250.7	15S	42.0E	16
File ID		Source #	Date Visited	Map #			Type of Site			
Q0134		23-008-5	06/06/2001	1R-1-581			Quarry			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
44 15'24.92878"	117 35'20.81748"	943.889	3.84	<1						
Comments										
GPS acquired at the access road.										
Rock Type	Unit	Color		Weathering			Jointing			
Basalt	Tba	Light Olive Grey (5Y 5/2)		Moderate to Decomposing			Highly Fractured			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair to Poor			R2 to R3	162	30,000	65,610				
Potentially Significant Site	Why			Open/Closed	Direction					
No	Too Small			Closed	NA					
Adjacent Land Use										
Open Space										
Remarks										
This site is adjacent to and north of Highway 26. The rock here is a decomposing, fine-grain basalt. There is limited screening with limited room to work. You can rip the rock, but it will produce a lot of fines. This site occupies a dry draw, with minimal ground to disturb. Approximately 8,000 cubic yards have been removed.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

NW

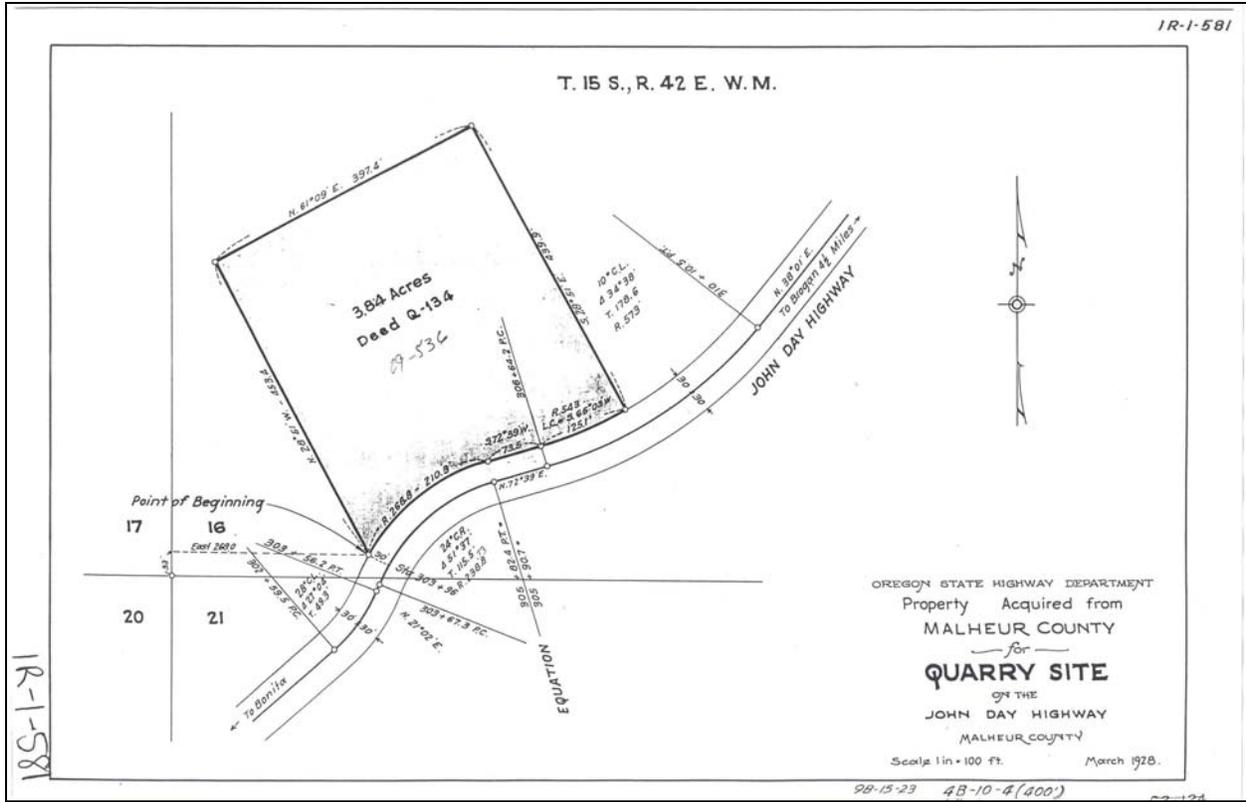
S



View of the quarry site located north of Highway 26.



Close-up view of the rock at this site.



Aerial view of the quarry site along Highway 26.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur	Vale Cairo Junction				14	0005	277	18S	45.0E	18
File ID		Source #	Date Visited	Map #		Type of Site				
11573, 11572		23-012-5	06/06/2001	1R-2-1486		Gravel				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
43 59'56.91858"	117 15'10.35900"	763.696	23.1	<10						
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color		Weathering			Jointing			
Volcanic Gravel	QTg	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good			NA	120	10,000	15,000				
Potentially Significant Site	Why						Open/Closed	Direction		
No	Large acreage, close to the highway but the quantity does not meet the classification for Goal 5.						Closed	NA		
Adjacent Land Use										
Residential										
Remarks										
This site is located west of Highway 26 about 0.5 miles. The ground is located on the top of a hill at Vale, OR. There are new homes being built around the property. The material is composed of small cobble size (15%), pebble size (55%) and sand/silt size clasts (30%). There is good to fair screening, with room to work. The terrain is fairly flat. The majority of the material is too small to crush, but good for cement. The site should be fenced with a locked gate. Site has multiple pits.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.47	2.57	19.4	3.8	2.1			17.4	0.5		
Material Use										
AC BASE (1991)										

NW

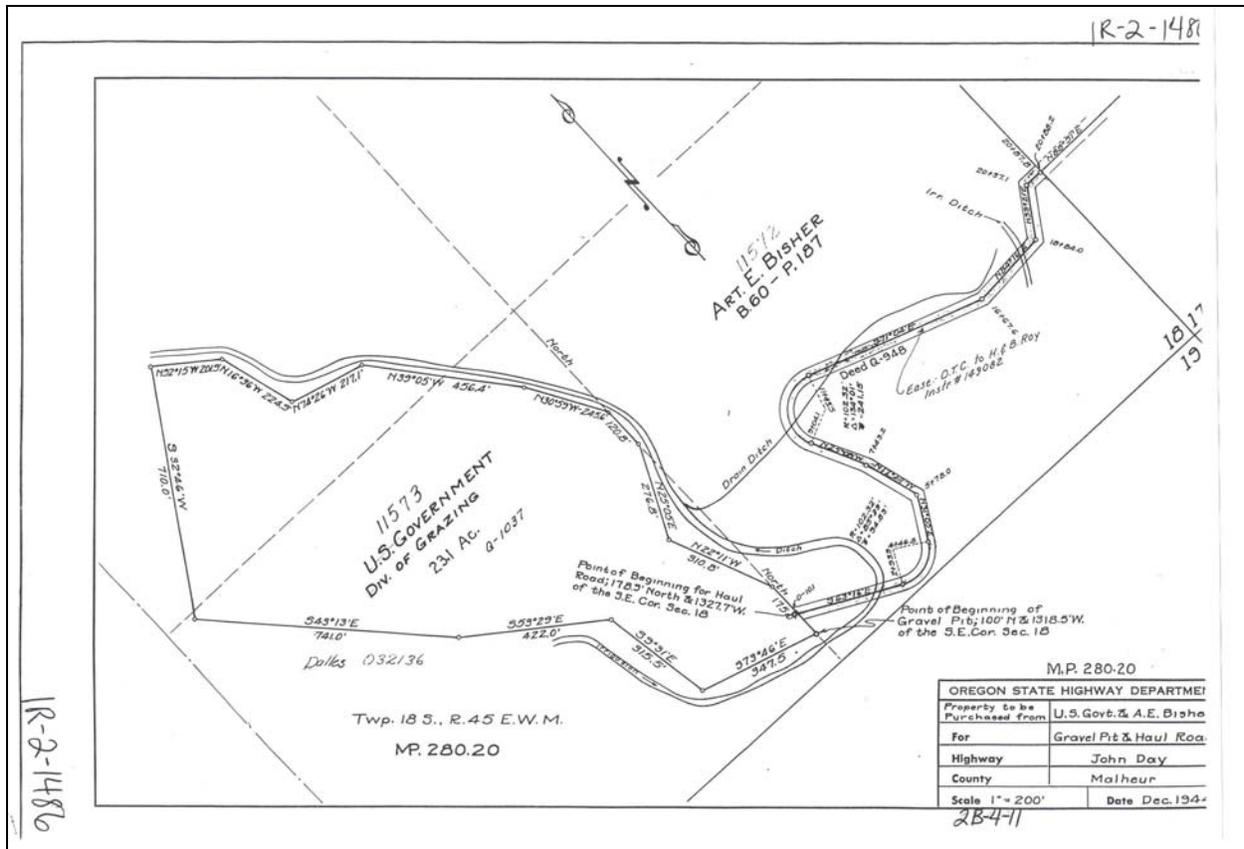
SW



View looking east at the gravel site near Vale, OR.



Close-up view of the aggregate that is at the site.



Aerial view of the gravel site near Vale, OR.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur				14	0007	180.8	21S	37.0E	06
File ID		Source #	Date Visited	Map #			Type of Site		
37456		23-013-5	08/15/2001	10C-44-8			Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
43 46'36.66957"	118 12'46.53140"	1319.291	80	<5		23-0176			
Comments									
GPS acquired in the pit.									
Rock Type	Unit	Color		Weathering			Jointing		
Basalt	Tba	Medium Dark Grey (N4)		Fresh			Highly Fractured to Massive		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Very Good			R3+	158	100,000	150,000			
Potentially Significant Site	Why			Open/Closed	Direction				
No	USA Ground			Closed	NA				
Adjacent Land Use									
Open Space									
Remarks									
This site is located about 1,000 meters northeast of Highway 20 or almost 2 miles by using the Forest Service Road. The rock here is a fine-grain, very good quality basalt. There is a large portion of rip rap at this location. There is good screening with ample room to work up here at the top of the hill. There is also a large stock pile site here too. The section is smaller than a normal section. Approximately 230,000 cubic yards have been removed.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
2.677	2.69	19.5	8.0	2.0	10.1	5.0	14.9	8.0	
Material Use									
Quarry Rock (2001)									

SE

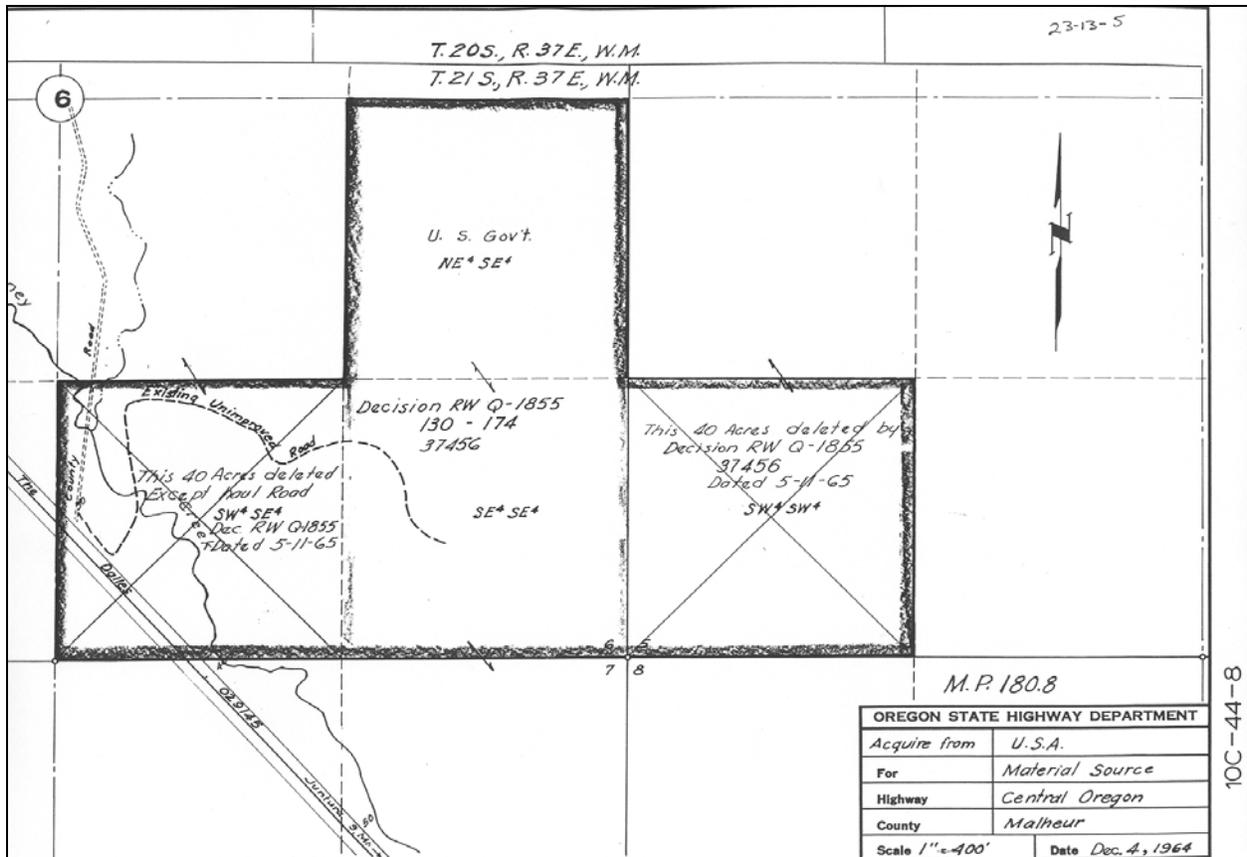
N



View of the quarry site located northeast of Highway 20.



Close-up view of the pit face.

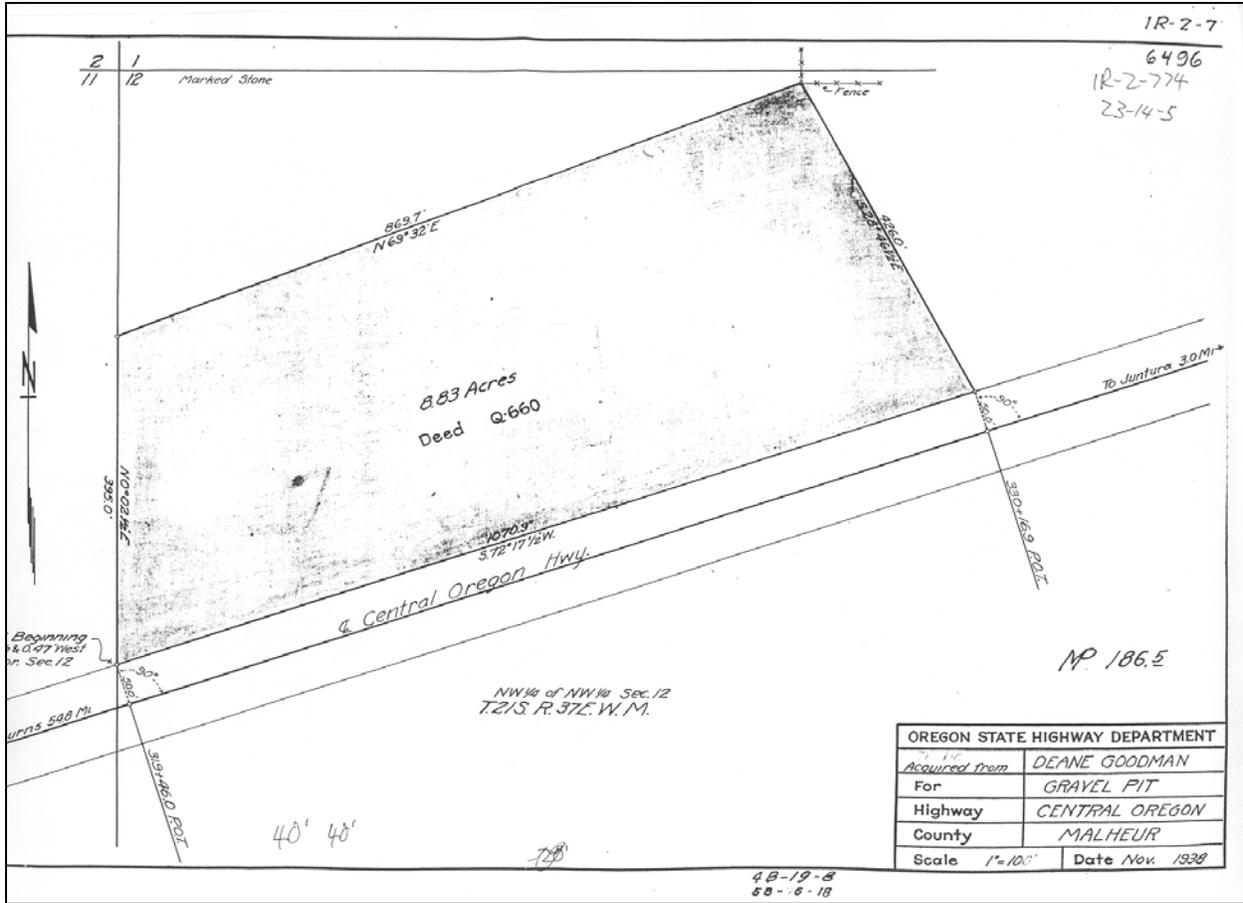


Aerial view of the quarry site northeast of Highway 20.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur					14	0007	186.3	21S	37.0E	12
File ID		Source #	Date Visited	Map #			Type of Site			
06496		23-014-5	06/13/2001	1R-2-774			Stock Pile Site			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
43 46'15.12000"	118 07'44.53000"	913	8.83	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)				
NA			NA	120						
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	Adjacent to Kingsbury Gulch					
Adjacent Land Use										
Open Space										
Remarks										
This is a stockpile site adjacent to and north of Highway 20. The terrain is flat and at the same elevation as the highway.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



View of the stock pile site that is north of Highway 20.



Aerial view of the stock pile site along Highway 20.

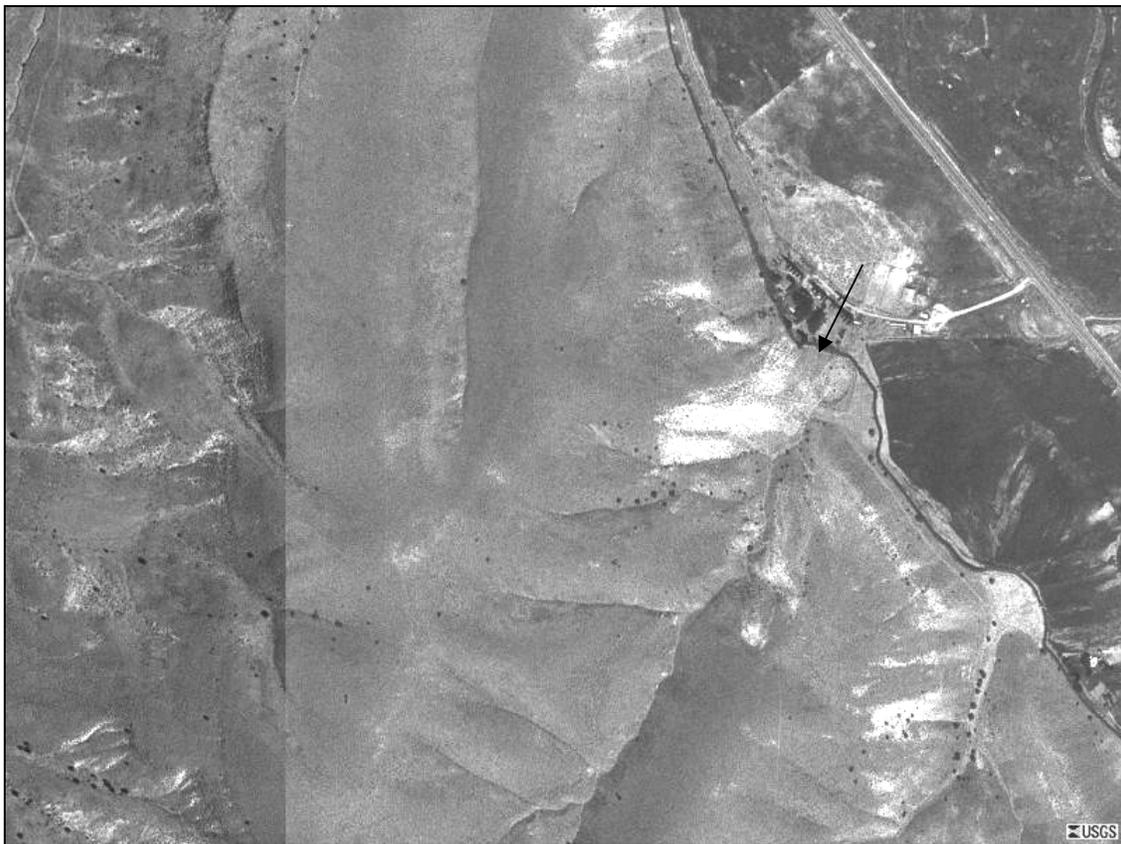
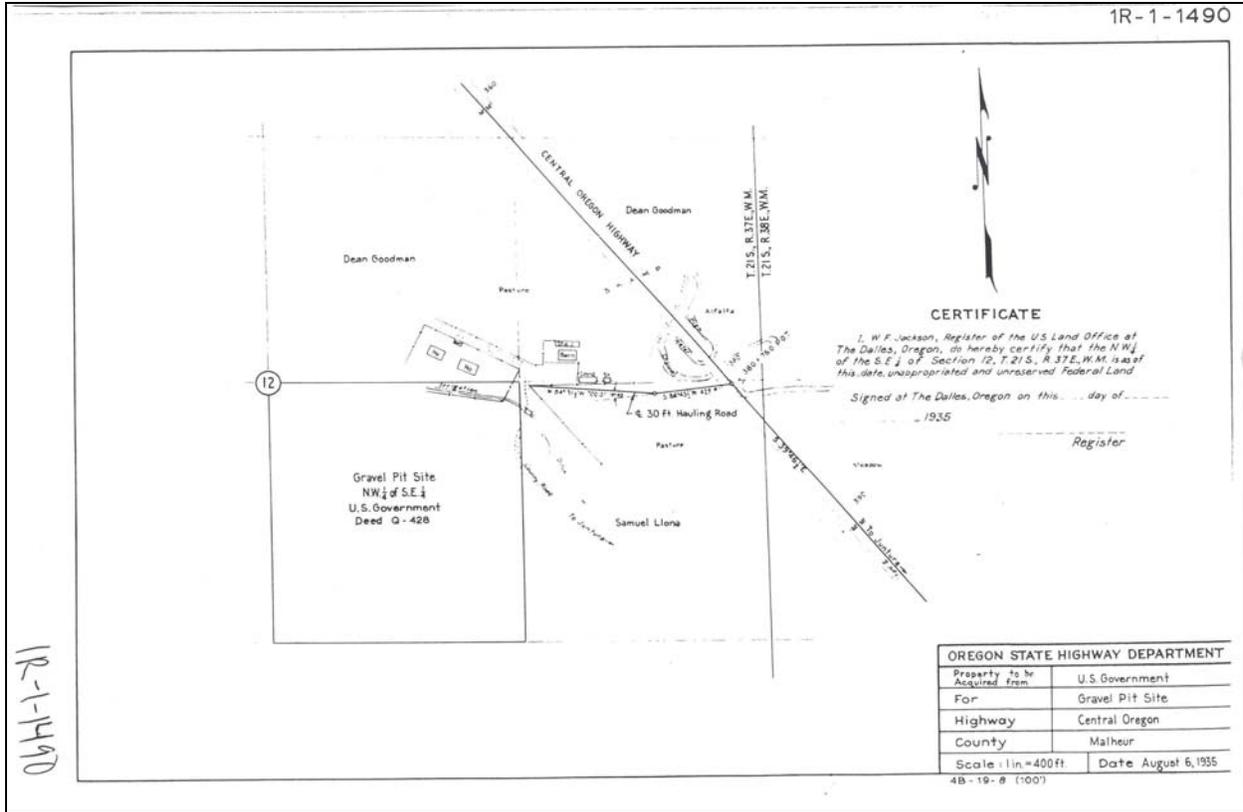
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur				14	0007	187.4	21S	37.0E	12
File ID		Source #	Date Visited	Map #			Type of Site		
Q0428		23-015-5	06/13/2001	1R-1-1490			Raw Land		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
43 45'50.95000"	118 07'19.79000"	914	40	NA					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color	Weathering			Jointing			
Basalt	Tb in Tlf	NA	NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Unknown			NA	120					
Potentially Significant Site	Why			Open/Closed	Direction				
No	USA Ground			NA	NA				
Adjacent Land Use									
Farming/ Open Space									
Remarks									
This site is located west of Highway 20 about 500 meters behind a farm. Access is through the farm and I did not visit the ground. This is rawland with no visible disturbance. The access would need to be developed if we wish to use this site. BLM owned.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
		15.7	1.4	1.3					
Material Use									
Emulsion (1989)									

SW

NW



View of the raw land site located about 500 meters beyond the farm buildings.



Aerial view of the raw land site located southwest of Highway 20 and some farm buildings.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur	Namorf				14	0007	214.3	21S	41.0E	06
File ID		Source #	Date Visited	Map #		Type of Site				
19648, 19673		23-018-5	06/13/2001	1R-5-334		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
43 46'26.04159"	117 44'13.99813"	821.941	66.3	<2	23-0148					
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color	Weathering		Jointing					
Basalt	Tba	Medium Grey (N5)	Fresh to Moderate		Highly Fractured to Massive					
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good to Fair			R1 to R3+	150	20,000	30,000				
Potentially Significant Site	Why		Open/Closed	Direction						
No	USA Ground		Closed	Adjacent to the Malheur River						
Adjacent Land Use										
Open Space										
Remarks										
This site is located on the old alignment of Highway 20 on south side of the Malheur River. The basalt here is a mix of many flows, all very different. There is room to work, but no screening from the highway. The terrain is very steep to vertical with a relief of almost 1000 feet. Removal of the talus slope or cutting into the lower part of the cliffs can be very dangerous for the crews coming in afterwards.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.53	2.67	13.1	3.6	1.5			12.5	0.5		
Material Use										
BASE AC (1979)										

E

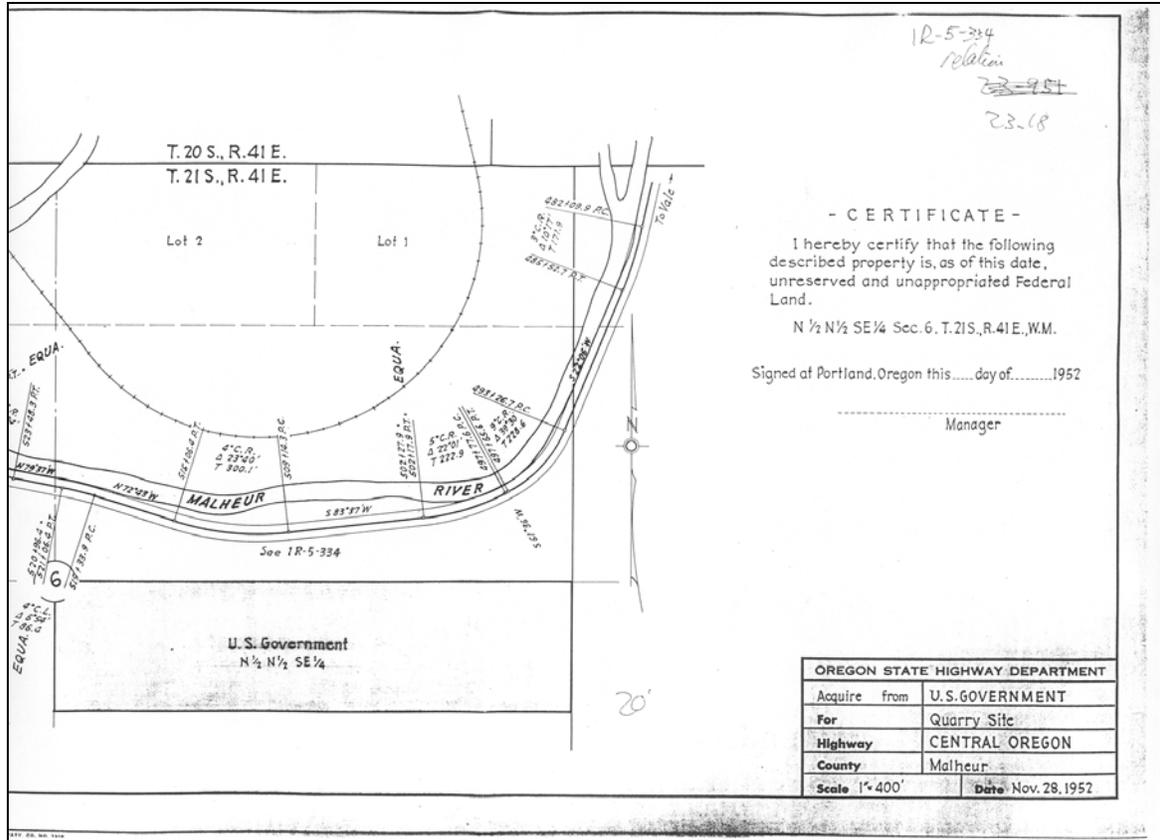
NW



View of the quarry site along the old alignment of Highway 20.



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



Aerial view of the quarry site along the old alignment of Highway 20.