

List of Sites in District 11

Source Numbers

13-064-4	4
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19-016-4	80
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19-068-4	116
19-069-4	118
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19-079-4	128

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Harney	South Riley Site				11	0049	0.5	23S	27.0E	32
File ID		Source #	Date Visited	Map #		Type of Site				
32415, Q0324		13-064-4	05/22/2001	1R-1-1246		Borrow				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
43°32'01.86099"	119°30'43.55042"	1293.929	80	<2	13-0067					
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color		Weathering		Jointing				
Volcanic Gravel	Qf	NA		NA		NA				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good to Fair			NA	120	968,000	1,568,160				
Potentially Significant Site	Why			Open/Closed	Direction					
No	USA Ground			Closed	To the north approximately 350 meters is Chickahoming Creek.					
Adjacent Land Use										
Open Space										
Remarks										
This site is bisected by Highway 395. The material here is composed of pebble size and less volcanic gravel (80%) and sand/silt (20%). The terrain is fairly flat with good screening from the highway. There is room to work. There is no gate and the site is open to all.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

W

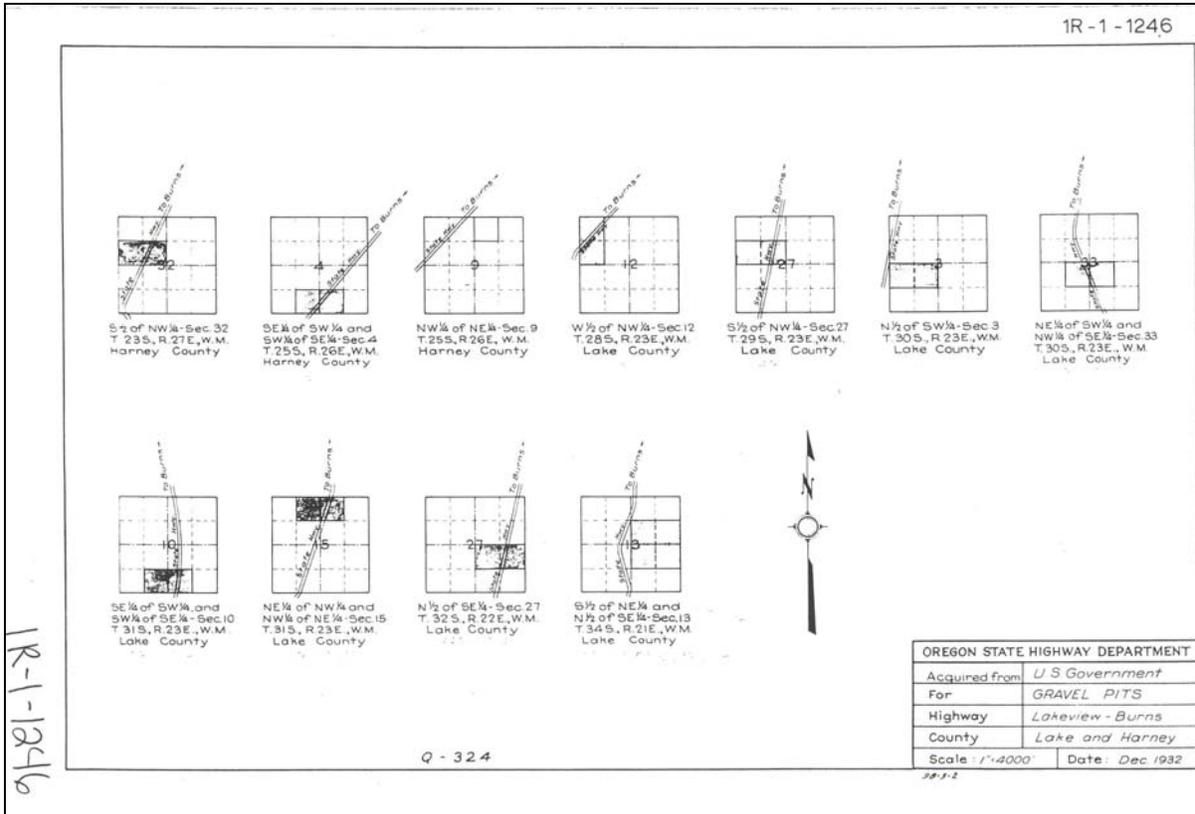
SW



360° view of the borrow site along Highway 395.



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



Aerial view of the borrow site along Highway 395.

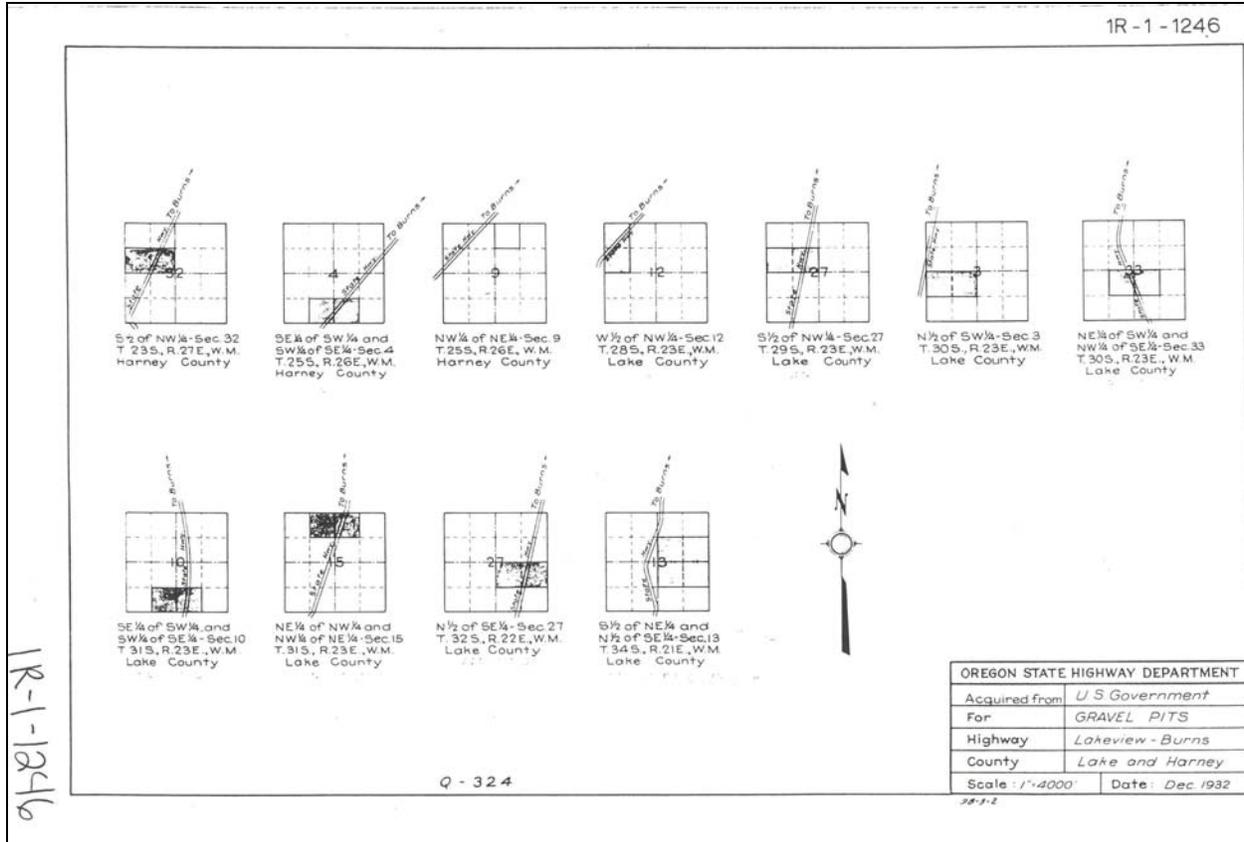
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Harney					11	0049	9.9	25S	26.0E	04
File ID		Source #	Date Visited	Map #		Type of Site				
32415		13-067-4	05/22/2001	1R-1-1246		Cinder Pit				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
43 25'36.67390"	119 36'30.61451"	1368.229	80	<1						
Comments										
GPS acquired on site.										
Rock Type	Unit	Color		Weathering			Jointing			
Cinder	QTp	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good			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										
Highway 395 bisects the northwest corner of the ground. The cinder pit is located on the east side of the highway. You will need to screen and crush a percentage of the sanding material here. There is limited screening with room to work. The terrain is gradual to flat. Part of the site is used for stockpiling while the west side would be a small site with the lions share of the ground a borrow site on the east side.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

N

SW



View of the cinder pit site along Highway 395.



Aerial view of the cinder pit site along Highway 395.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Harney					11	0049	16	25S	25.0E	33
File ID		Source #	Date Visited	Map #		Type of Site				
09805		13-068-4	05/22/2001	1R-2-1229		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
43 21'15.75785"	119 43'26.77601"	1440.54	40	<3						
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color		Weathering		Jointing				
Basalt	Tob	Medium Grey (N5)		Slight		Highly Fractured				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair to Poor			R2	145	400,000	783,000				
Potentially Significant Site	Why			Open/Closed	Direction					
No	USA Ground			Closed	Adjacent to the site is Horseshoe Bar Reservoir					
Adjacent Land Use										
Open Space										
Remarks										
This site is located about 2.4 miles west of Highway 395. The rock is a very platy, highly fractured basalt . This rock produces a lot of fines due to the fracture pattern. You can rip the material, but will obtain some rip rap. There is very good screening with room to work. The terrain is moderate, about 10 to 25 degrees. Approximately 150,000 cubic yards have been removed. BLM ground.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

W

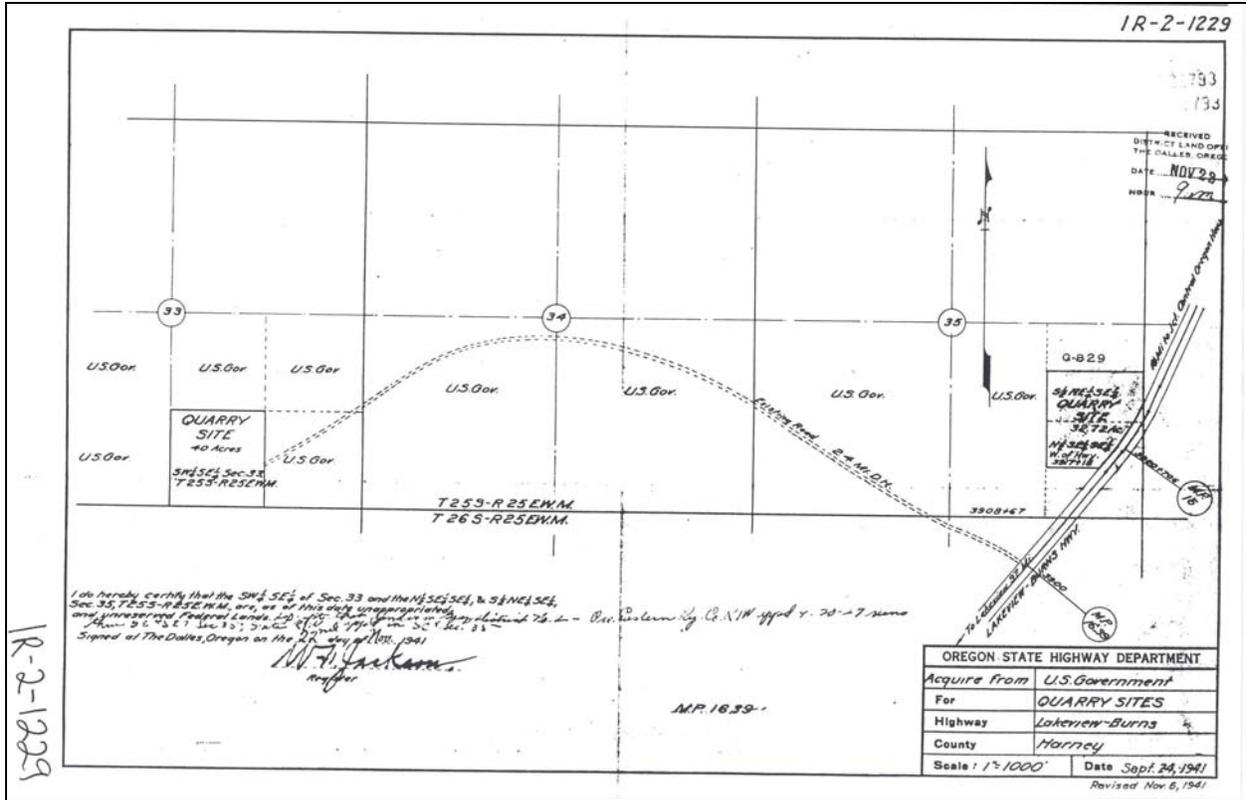
SE



View of the quarry site located approximately 2.4 miles west of Highway 395.



Close-up view of the rocks found at the quarry site.



Aerial view of the quarry site.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Harney	Horseshoe Quarry				11	0049	16.3	25S	25.0E	35
File ID		Source #	Date Visited	Map #		Type of Site				
Q0829		13-069-4	05/23/2001	1R-2-1229		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
43 21'24.34245"	119 40'39.21994"	1351.08	32.72	<2	13-0039					
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color		Weathering		Jointing				
Basalt	Tob	Medium Grey (N5)		Fresh to Slight		NA				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good to Fair			R3+	176	500,000	1,188,000				
Potentially Significant Site	Why			Open/Closed	Direction					
No	USA Ground			Closed	NA					
Adjacent Land Use										
Open Space										
Remarks										
This site is located adjacent to and west of Highway 395. There are few exposures to evaluate the rocks. In the small pit is a very platy fine-grain basalt that can be brittle. There is cinder and soils mixed in. You can rip the material but will acquire large rip rap. The terrain is gradual (3 degrees). There is no screening from the highway, but ample room to work. The rock produces a lot of fines. No gate or fencing.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



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



Close-up view of the platy basalt that can be found at this site.

County	Site Name	Dist	Hwy	Mile Pt	TWP	RGE	Sect	
Harney		11	0049	17.6	26S	25.0E	03, 10	
File ID		Source #	Date Visited	Map #		Type of Site		
03542		13-070-4	05/23/2001	1R-2-1140		Borrow		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #			
43 20'20.79000"	119 41'52.43000"	1361	77.8	<3				
Comments								
Lat. and Long. acquired using Terrain Navigator Software								
Rock Type	Unit	Color	Weathering		Jointing			
Volcanic Colluvium	Qf	NA	NA		NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)		
Fair to Good			NA	120	960,000	1,555,200		
Potentially Significant Site	Why			Open/Closed	Direction			
No	Majority of the site is BLM owned.			Closed	NA			
Adjacent Land Use								
Open Space								
Remarks								
This site is adjacent to and west of Highway 395. The material is composed of cobble size and less volcanic gravel (30%) and sand/silt (70%). The terrain is flat and at road elevation. Any pit will be below the road grade. There was water in the pit at the time of the visit. There is no screening from the highway but there is ample room to work. ODOT owns 1.5 acres, BLM owns the rest of the site.								
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.
Material Use								

SW

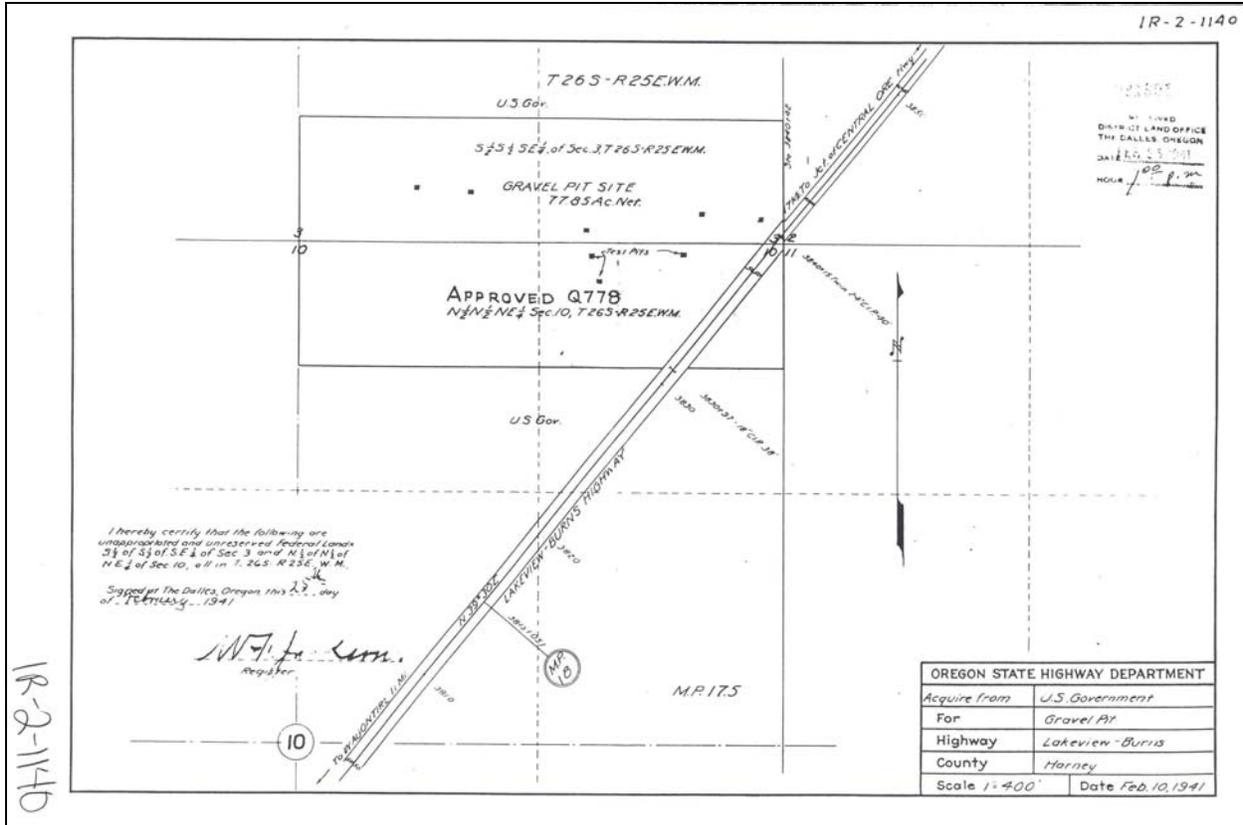
NE



View of the large 77.8 acre borrow site located along Highway 395.



Close-up view of the material at this site.



Aerial view of the borrow site.

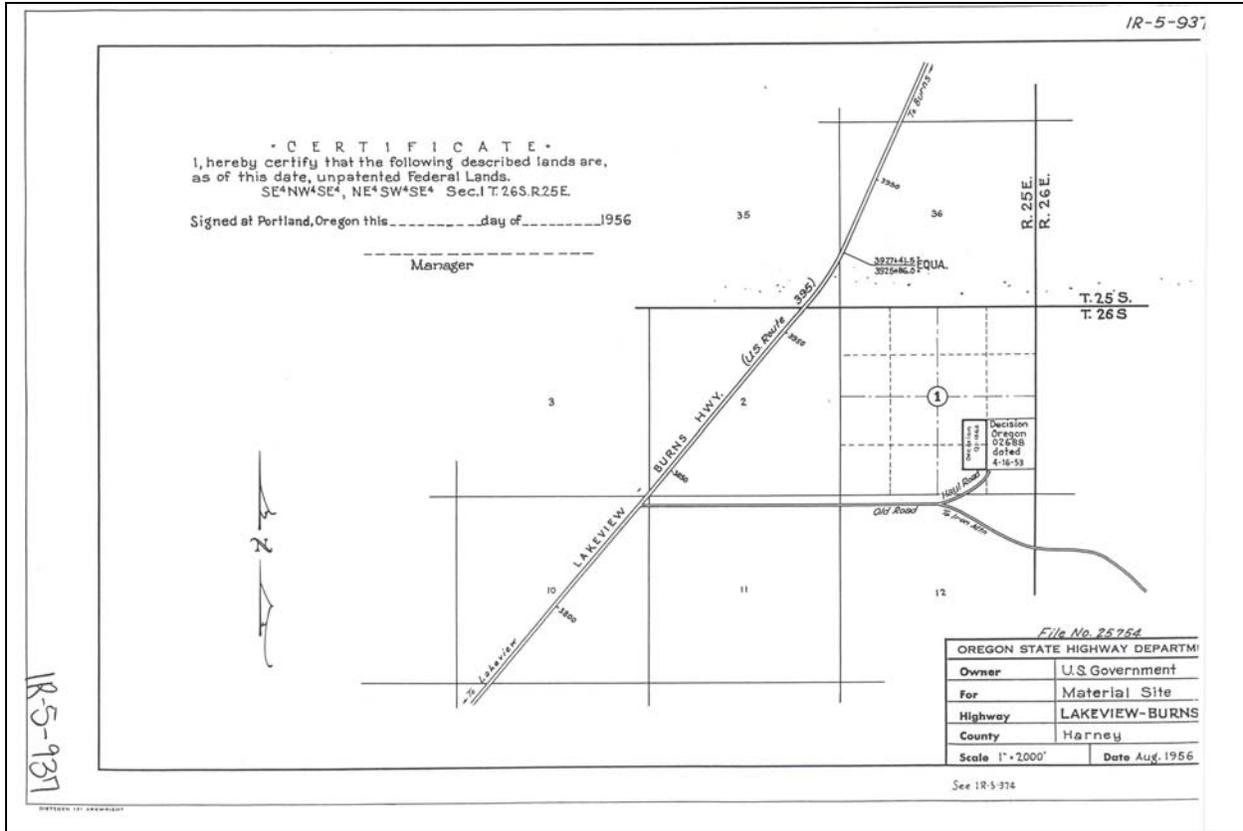
County	Site Name	Dist	Hwy	Mile Pt	TWP	RGE	Sect	
Harney		11	0049	17.6	26S	25.0E	01	
File ID		Source #	Date Visited		Map #		Type of Site	
25754		13-071-4	05/23/2001		1R-5-937, 1R-5-374		Cinder Pit	
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #			
43°20'34.92755"	119°39'44.99824"	1369.202	60	<12				
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	1,300,000	2,106,000		
Potentially Significant Site	Why			Open/Closed	Direction			
No	NA			NA	NA			
Adjacent Land Use								
Open Space								
Remarks								
This cinder site is located east of Highway 395 about 1.5 to 2.0 miles. This is a large cinder site with good clean scoriaceous basalt that needs to be screened and crushed every few years. The terrain is gradual (6 degrees) with no screening from the highway and ample room to work.								
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.
Material Use								

N

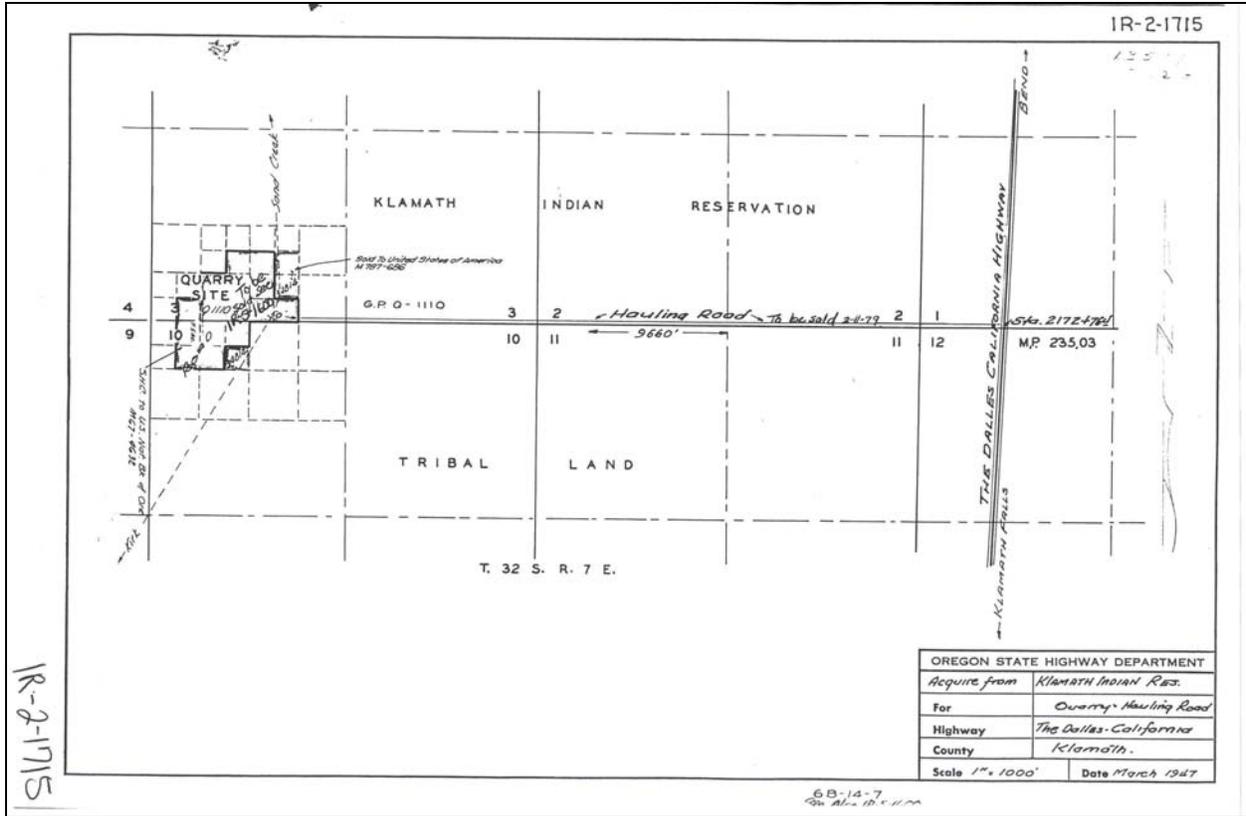
NW



View of the cinder site located approximately 2 miles east of Highway 395.



Aerial view of the cinder pit site located east of Highway 395.

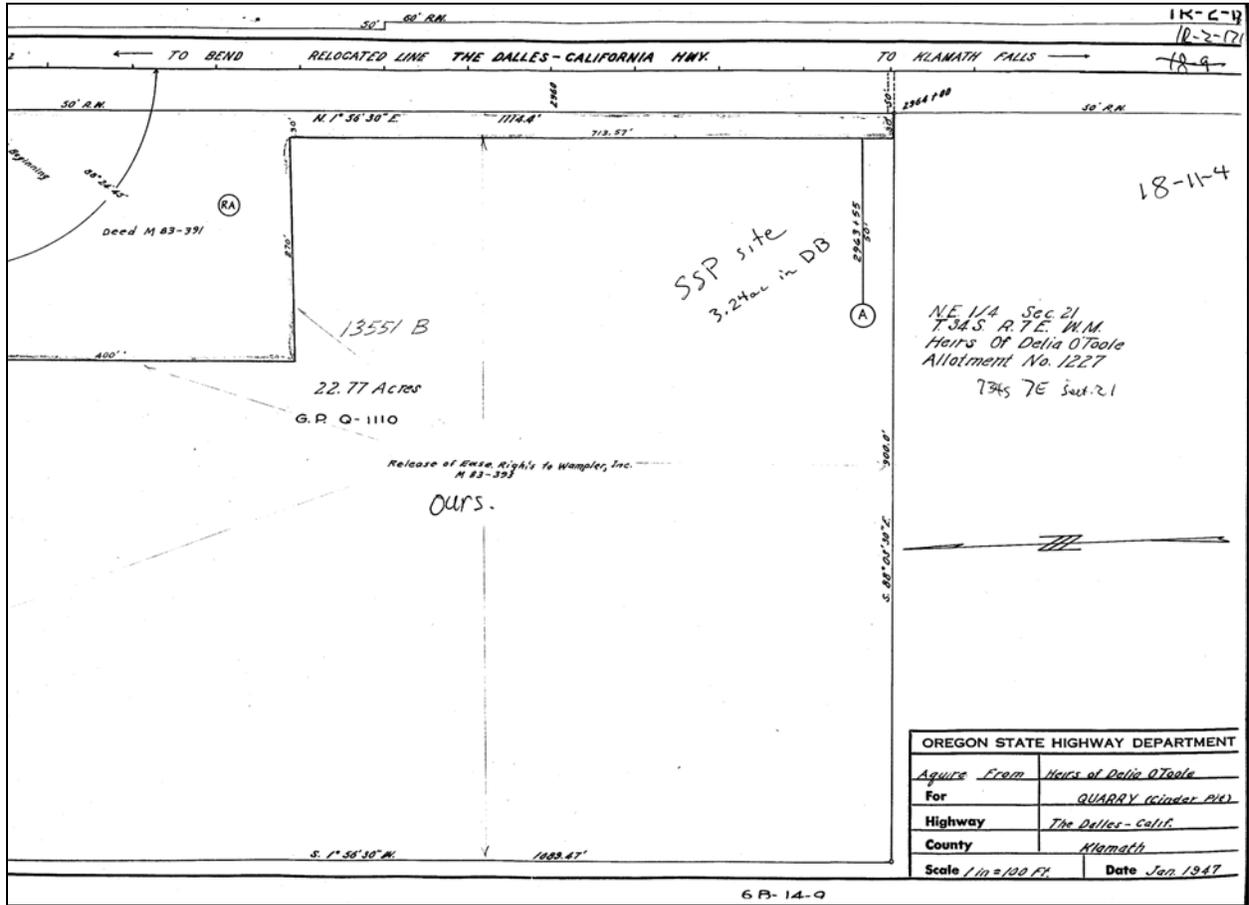


Aerial view of the raw land site that is located west of Highway 97.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Klamath					11	0004	248	34S	07.0E	21
File ID		Source #	Date Visited	Map #			Type of Site			
Q1018		18-011-4	05/08/2001	1R-2-1716			Stock Pile Site			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42°36'55.50000"	121°52'43.16000"	1302	3.38	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
NA	QTb	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
NA			NA	120						
Potentially Significant Site	Why			Open/Closed	Direction					
No	Too small			Closed	NA					
Adjacent Land Use										
Remarks										
This site is located west of and adjacent to Highway 97 and is used as a stock pile site.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
		14.86								
Material Use										



Aerial view of the stockpile site along Highway 97.

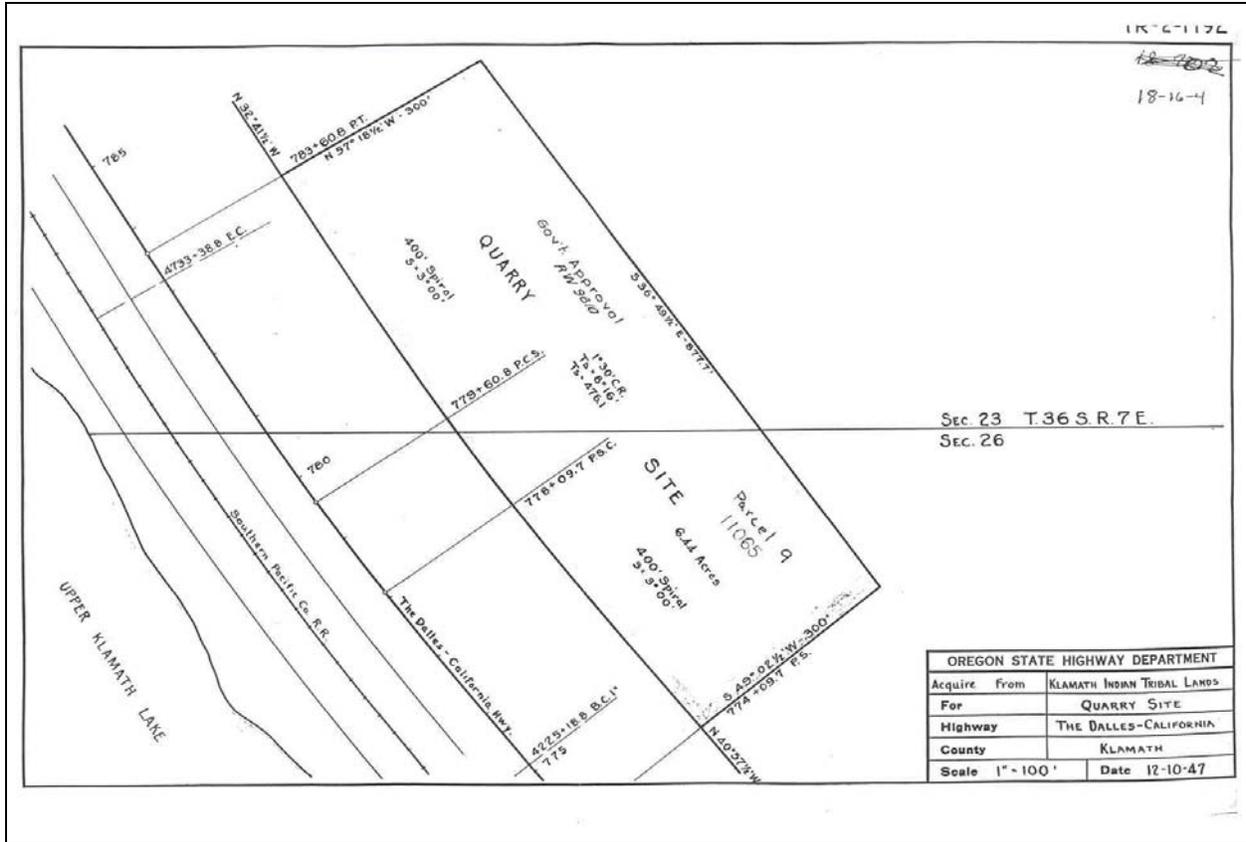


County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Klamath					11	0004	259.2	36S	07.0E	23
File ID		Source #	Date Visited	Map #		Type of Site				
11065		18-016-4	06/29/2000	1R-2-1792		Road Cut				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42°25'40.89000"	121°51'15.87000"	1274	6.44	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering		Jointing				
Basalt	QTb	NA		Slight		Massive to Highly Fractured				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good			NA	120						
Potentially Significant Site	Why	Open/Closed		Direction						
No	NA	Closed		To the west about 150 meters is Upper Klamath Lake						
Adjacent Land Use										
Open space										
Remarks										
This is a road cut along Highway 97 to the east. There is no access to this site from the roadway. The terrain is very steep with no screening and no room to work.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

NE



Looking to the northeast at the road cut along Highway 97.



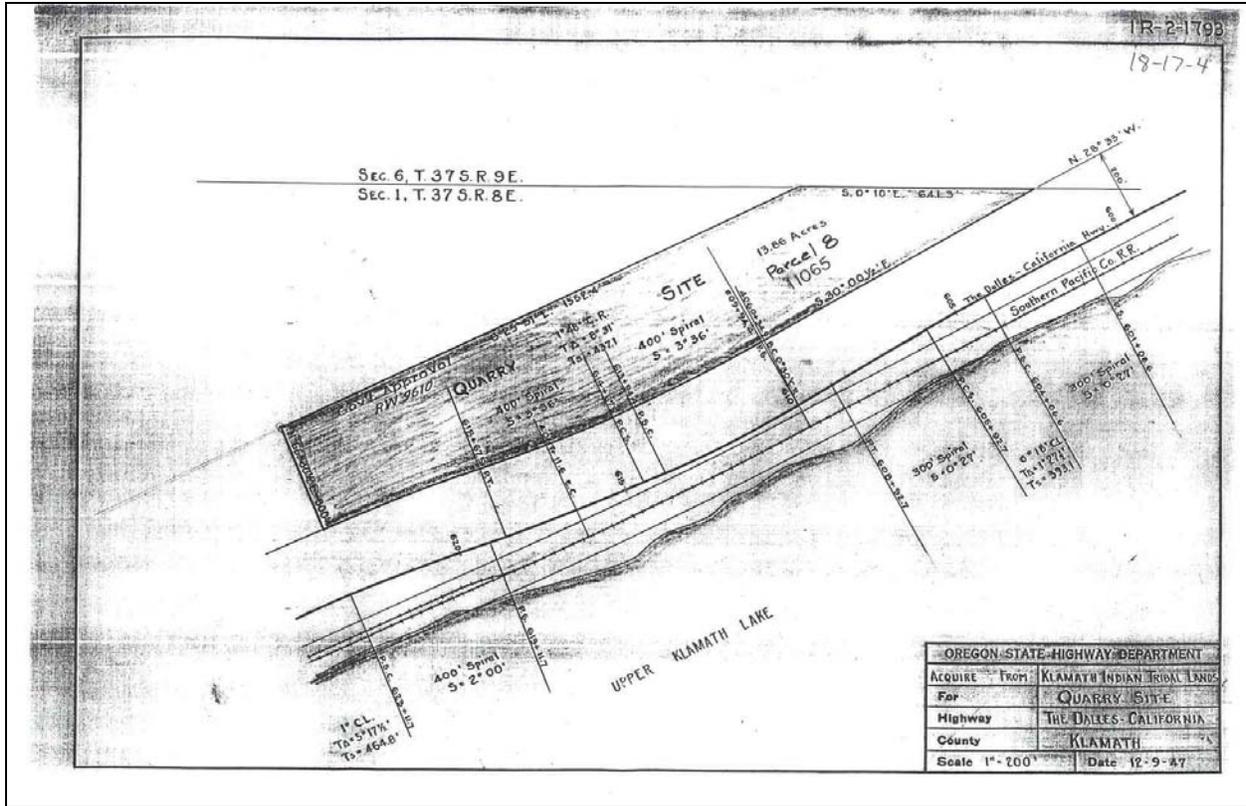
Aerial view of the site in relation to Upper Klamath Lake and Highway 97.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Klamath				11	0004	261.6	37S	08.0E	01
File ID		Source #	Date Visited	Map #			Type of Site		
18-017-4		06/29/2000	1R-2-1793			Road Cut			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #				
42°23'16.44000"	121°48'56.55000"	1274	13.86	<1 acre					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
Basalt	Qtb	NA		Slight			Moderate Fracture to Massive		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Good			NA	120					
Potentially Significant Site	Why	Open/Closed		Direction					
No	NA	Closed		West about 100 meters is the Upper Klamath Lake					
Adjacent Land Use									
Open space									
Remarks									
This is a road cut along the eastern side of Highway 97. This site has no access off of the highway. The terrain is very steep with no room to work or screening. There is no record in the Right of Way database of this site.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

N



Looking north at the road cut site along Highway 97.



Aerial photograph of the road cut site along Highway 97 and the Upper Klamath Lake.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Klamath	Klamath Straits			11	0004	286.36	40S	08.0E	23
File ID		Source #	Date Visited	Map #			Type of Site		
01071		18-019-4	06/22/2000	1R-1-1296			Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
42°04'45.51623"	121°51'02.44823"	1250.89	8.58	<2 acres		18-0058			
Comments									
GPS acquired in the pit.									
Rock Type	Unit	Color		Weathering			Jointing		
Basalt	QTb	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Fair to poor			NA	155	50,000	104,625			
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			Closed	Adjacent to an irrigation ditch				
Adjacent Land Use									
Farming									
Remarks									
This site is west of Highway 97 about 200 meters. This ground is along a fault scarp and the material is composed of angular basalt and andesite in a debris flow. The terrain is very steep and this site is dangerous with the amount of loose colluvium on the surface. If we wish to open this site back up we should work from the top down. The adjacent farmer is using part of this site for a feed lot. There is a private quarry to the south. You have to cross the main north/south rail line to get to the ground.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
2.63	3	17	2.8	.9	13.4	.8	13.7	.4	
Material Use									
AC (1991)									

S

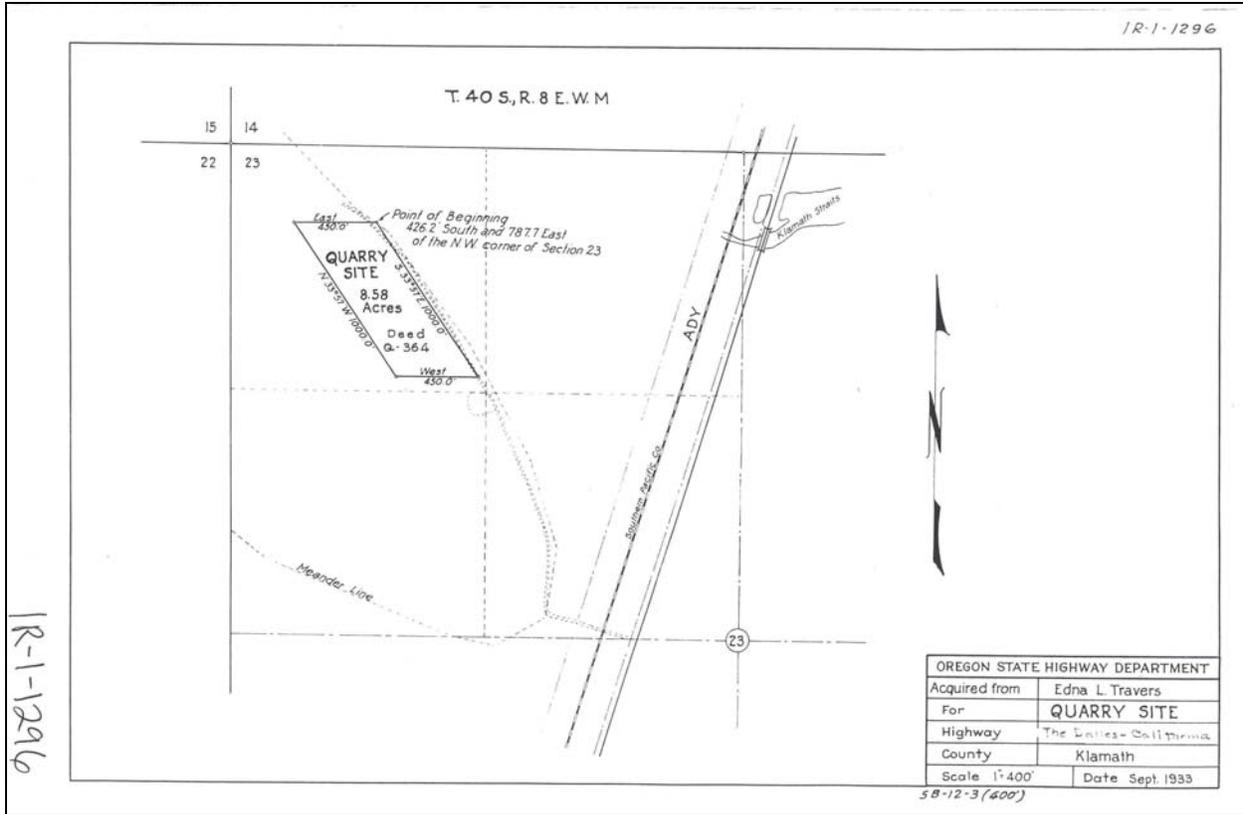
W

NW



View of the quarry site located west of Highway 97.

Close-up view of the debris flow with the hammer for scale.



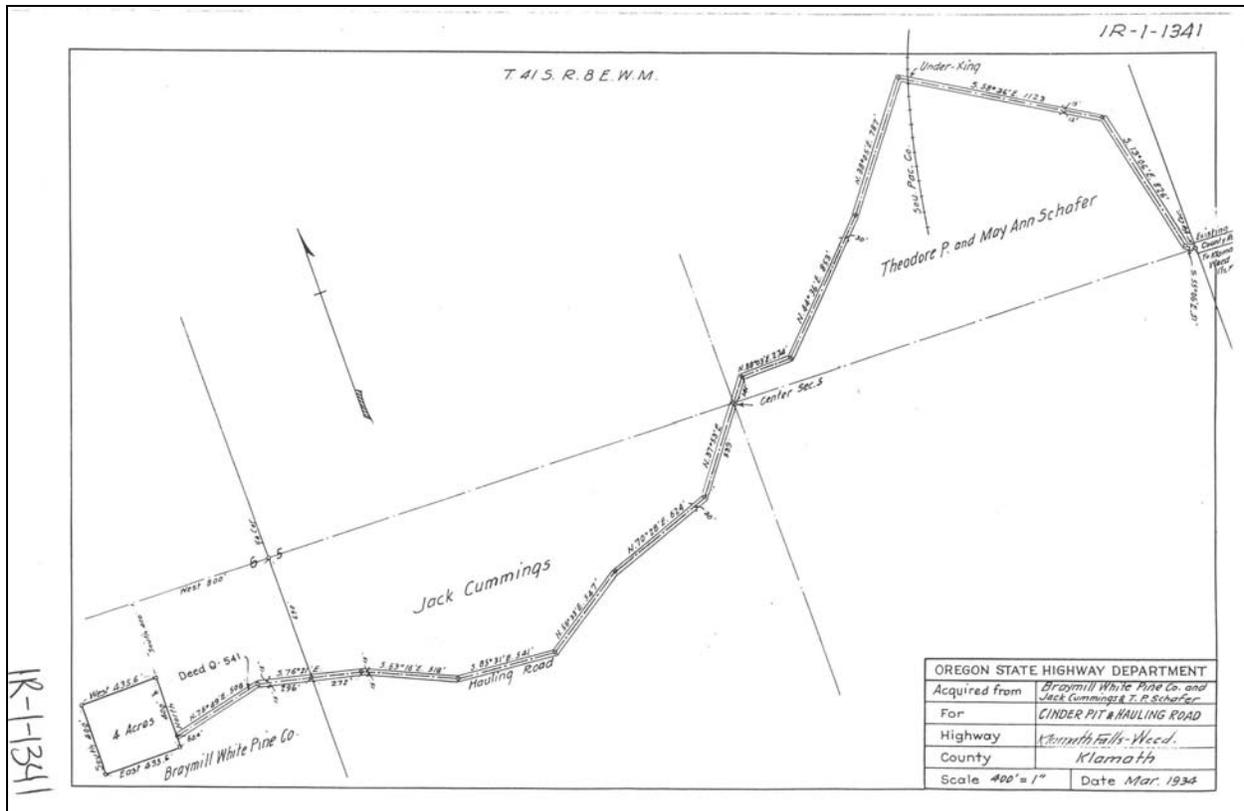
Aerial view of the quarry site located along Highway 97, note all of the irrigation canals.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Klamath				11	0004	289.22	41S	08.0E	06
File ID		Source #	Date Visited	Map #			Type of Site		
01399		18-021-4	06/21/2000	1R-1-1341			Cinder Pit		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
42°01'44.87997"	121°55'00.40349"	1344.31	4.55	<2 acres					
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	100,000	162,000			
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			Closed	NA				
Adjacent Land Use									
Open space									
Remarks									
This cinder site is located about one mile west of Highway 97 through a private farm. The face of the pit is too steep and should be addressed if we wish to use this site. The material is a good clean source of sanding material. Some lithified scoria and minor basalt flows are exposed in the pit. About 40,000 cubic yards have been removed in the past. Property Management wants to surplus this ground.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

N



View to the north of the cinder pit and the surrounding area.



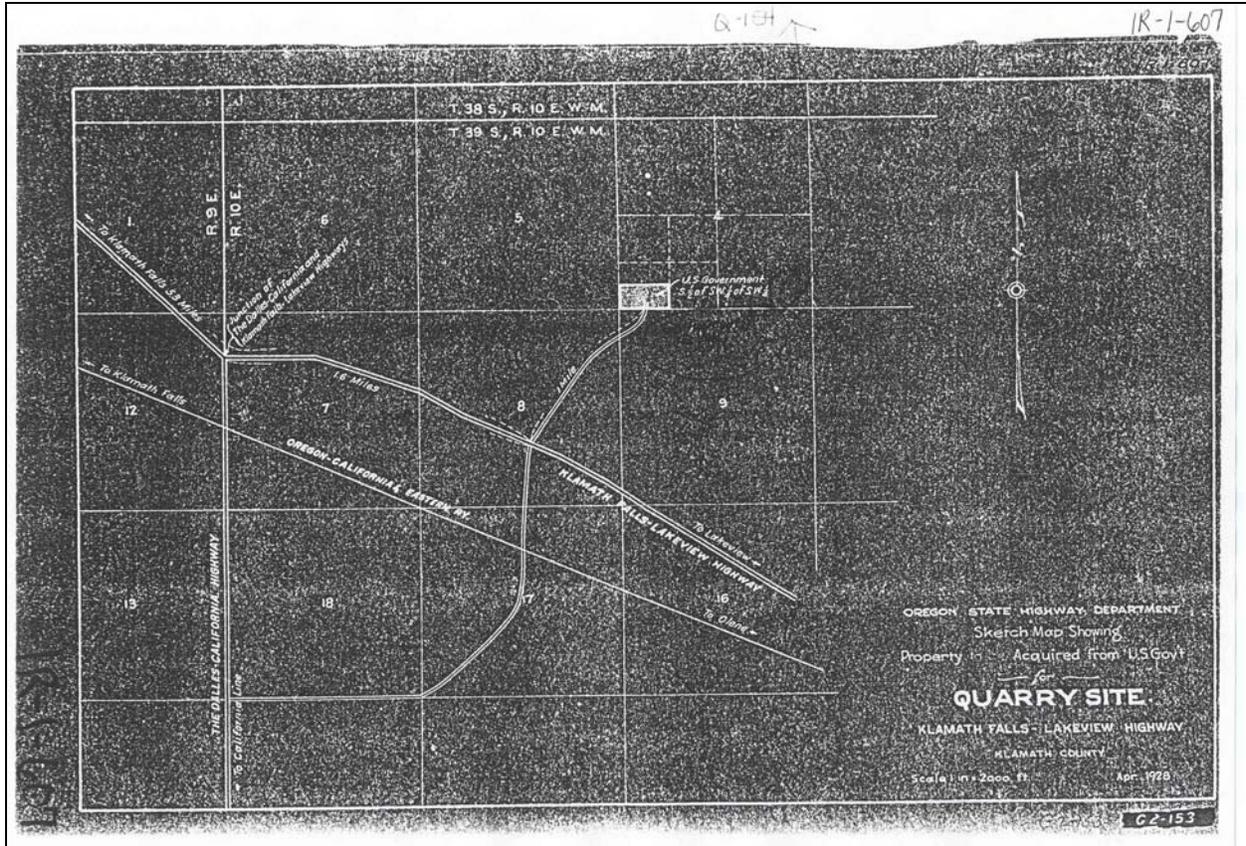
Aerial view of the cinder pit (arrow) and the adjacent private sites.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Klamath					11	0020	7.41	39S	10.0E	04
File ID		Source #	Date Visited	Map #		Type of Site				
Q0154		18-022-4	06/22/2000	1R-1-607		Raw Land				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42°11'58.49000"	121°39'29.88000"	1342	20	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color	Weathering		Jointing					
Volcanic Rock	Ts	NA	NA		NA					
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
NA			NA	120						
Potentially Significant Site	Why			Open/Closed	Direction					
No	USA Ground			NA	NA					
Adjacent Land Use										
Homes adjacent										
Remarks										
This is raw land that is adjacent to a new residential subdivision. There is no access to this site. USA ground.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

NW



Looking towards the raw land site.



Aerial view of the raw land site in relation to the residential subdivision.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Klamath	Bonanza Jct. Quarry				11	0020	27.37	38S	11.0E	03
File ID		Source #	Date Visited		Map #			Type of Site		
Q0198		18-023-4	06/22/2000		1R-1-631			Road Cut		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42°18'24.28876"	121°24'27.90365"	1373.92	13.03	NA						
Comments										
GPS acquired along Highway 140										
Rock Type	Unit	Color		Weathering			Jointing			
Andesite	Tob	Brownish Grey (5YR 4/1)		Slight to Fresh			Moderately Fractured			
Quality				Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Good to Fair				R3	161	160,000	347,760			
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			NA	NA					
Adjacent Land Use										
Residential along highway										
Remarks										
This is a road cut along Highway 140. The andesite is a coarse-grain platy fractured flow rock. There is limited room to work with no screening from the highway. You can rip the material. The terrain is fairly flat. No overburden.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
	2.65	17.9	19.5	4.2			19.9	1.3		
Material Use										
(1975)										

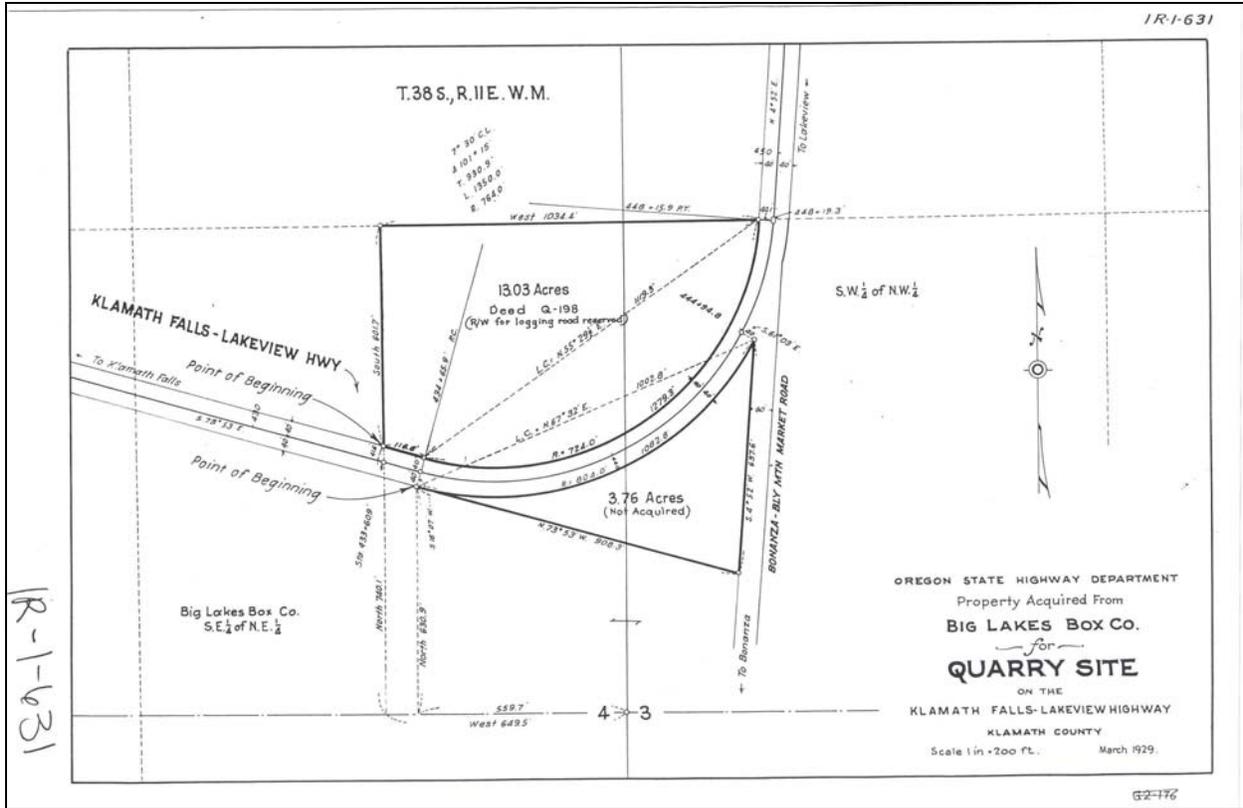
S

W



Looking to the west at the small road cut site along Highway 140.

Close-up view of the volcanic rock with the hammer for scale.



Aerial view of the road cut site along Highway 140.

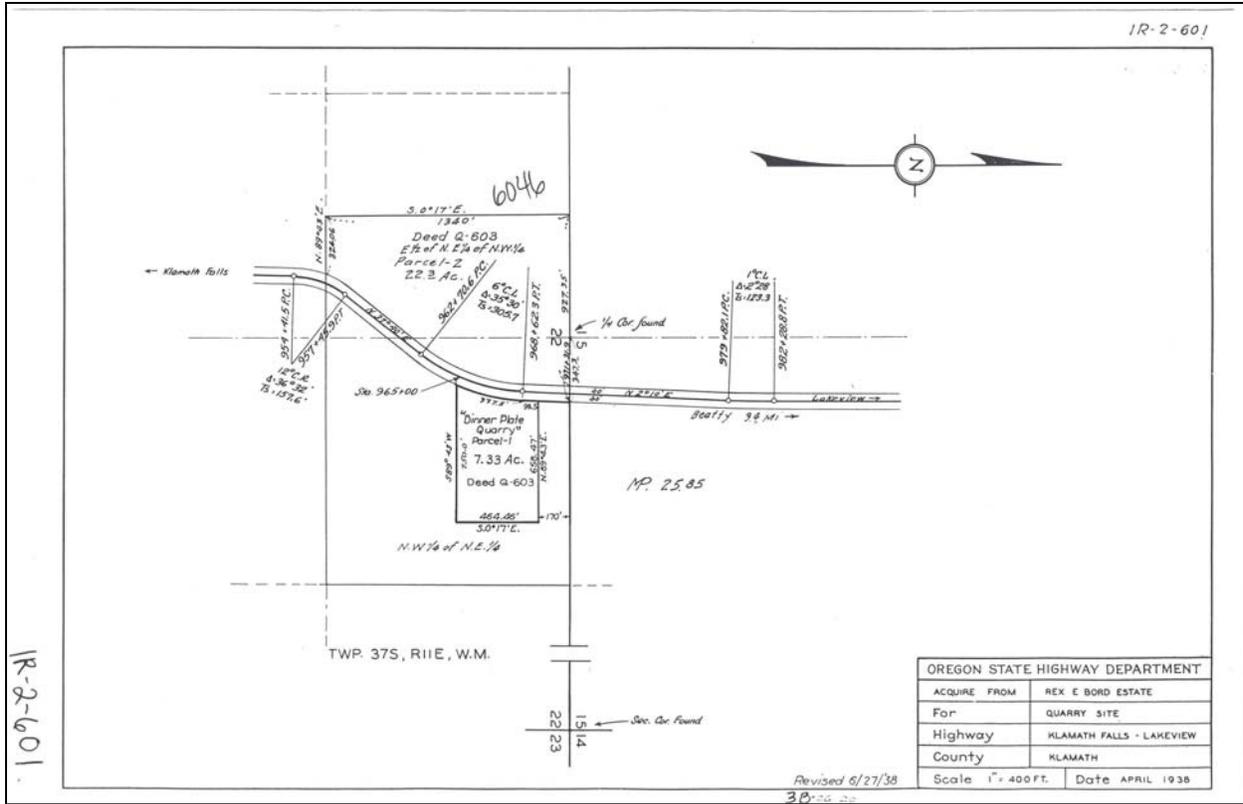
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Klamath	Dinner Plate Quarry				11	0020	31.06	37S	11.0E	22
File ID		Source #	Date Visited	Map #		Type of Site				
06046		18-024-4	06/22/2000	1R-2-601		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42°21'14.74710"	121°23'48.76170"	1547.959	7.33	<2 acres	18-0050					
Comments										
GPS acquired next to the pit.										
Rock Type	Unit	Color		Weathering		Jointing				
Andesite	Tob	Medium Light Grey (N6)		Fresh		Highly Fractured				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good			R3+	156	95,000	200,070				
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	NA					
Adjacent Land Use										
Open space										
Remarks										
This site is bisected by Highway 140 at the summit. The rock is a very fine-grain andesite with a minor amount of phenocrysts. The rock is very platy and should not be ripped. You should drill and blast the rock to control the size of the rock. There is room to work but no screening from the highway. The terrain is flat with no overburden. There was water in both pits.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.61	2.34	27.3			20.7	1.9				
Material Use										
Base and AC (1969)										



Panoramic view of the quarry site at the summit of Highway 140.



Close-up view of the very platy nature of this volcanic rock.



Aerial view of the quarry site along Highway 140.

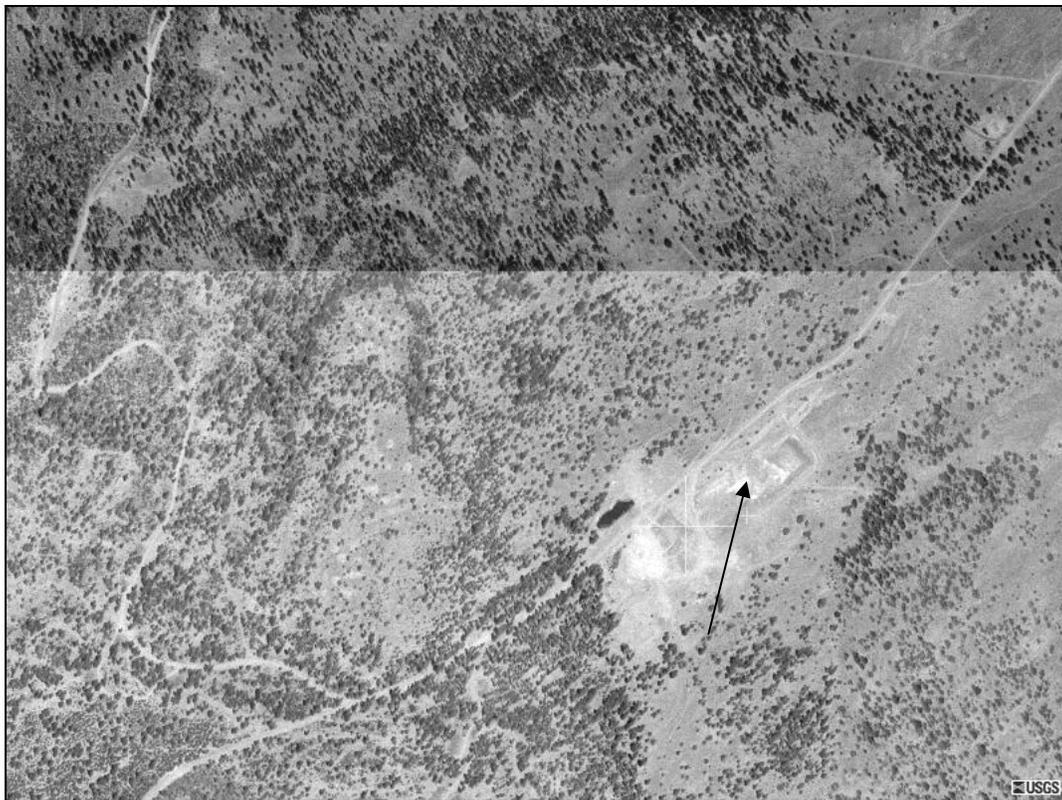
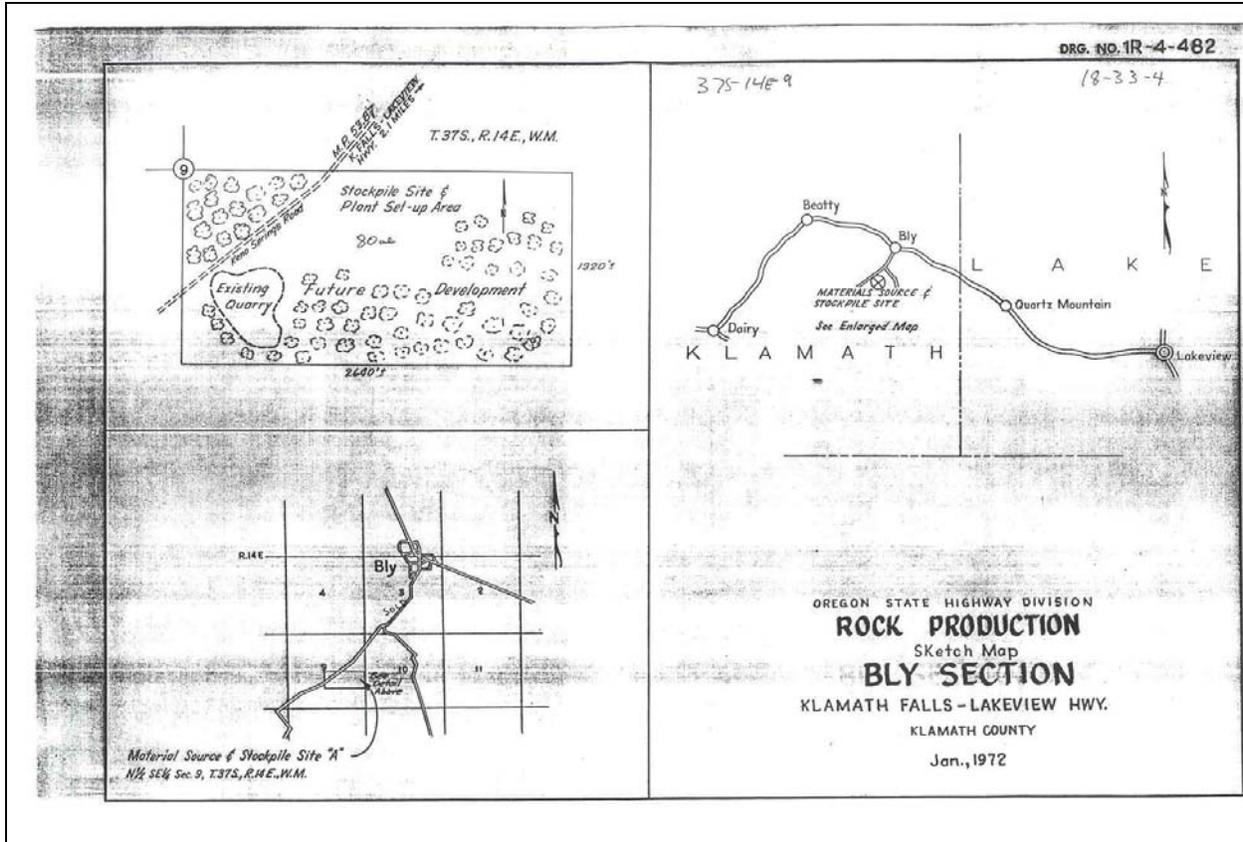
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Klamath	Bly Quarry			11	0020	53.87	37S	14.0E	09
File ID		Source #	Date Visited	Map #			Type of Site		
NA		18-033-4	06/27/2000	1R-4-482			Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
42°22'29.17000"	121°03'51.62000"	1406	80	<3 acres		18-0079			
Comments									
GPS acquired in the pit, but did not process. Acquired by using the Terrain Navigator Software.									
Rock Type	Unit	Color		Weathering			Jointing		
Basalt	Tb	Olive Grey (5Y 4/1)		Slight to Moderate			Highly Fractured		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Fair			R2+	169	500,000	1,140,750			
Potentially Significant Site	Why			Open/Closed	Direction				
No	BLM ground			Closed	NA				
Adjacent Land Use									
Open space									
Remarks									
The property is located about 2 miles south of the town of Bly and Highway 140. This is a fine-grain platy basalt. There is variable weathering within this unit. The rock produces a lot of fines. There is ample room to work with good screening. No overburden. No gate or fence. You can rip the rock. The pit has some water in it. County road bisects part of the property. This is BLM ground. This property is not in the Right of Way database.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
2.69	2.73	15.3	4	2	19.7	.8	16.5	.7	
Material Use									
AC, EAC, Base Rock (1995)									



Panoramic view of the small pit located south of Bly, OR.



Close-up view of the fracture pattern with the hammer for scale.



Aerial view of the quarry site and the surrounding ground.

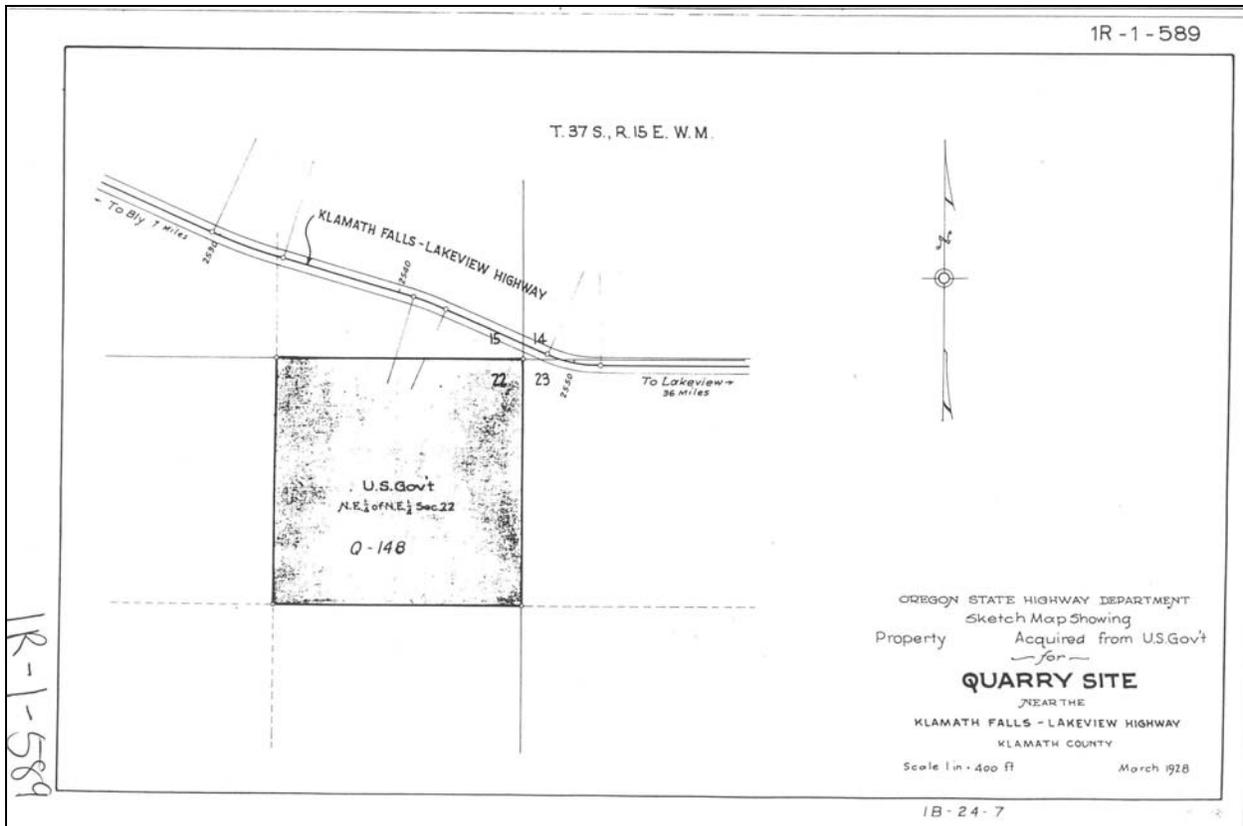
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Klamath					11	0020	60.8	37S	15.0E	22
File ID		Source #	Date Visited	Map #		Type of Site				
Q0148		18-035-4	06/27/2000	1R-1-589		Raw Land				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42°21'12.80000"	120°55'12.50000"	1470	40	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color	Weathering		Jointing					
Basalt	Tb	NA	Slight		Unknown					
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good to Fair			R3+	120						
Potentially Significant Site	Why			Open/Closed	Direction					
No	USA Ground			Closed	NA					
Adjacent Land Use										
Open space										
Remarks										
This is a raw land site that is located adjacent to and south of Highway 140. The basalt is vesicular and slightly weathered. There would be some screening and ample room to work. There could be some overburden. You could rip the material and get some large rip rap. Forest Service road 3716 is near the northeast corner of the ground. This site is owned by the BLM and would need an assessment.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

SW



Looking to the southwest at the road cut along Highway 140 and the property in the background.

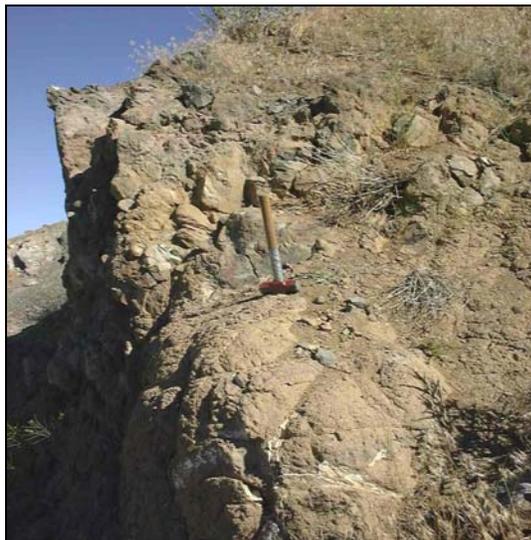
Close-up view of the fracture pattern in the volcanic rock at the road cut.



Aerial view of the raw land site located south of Highway 140.

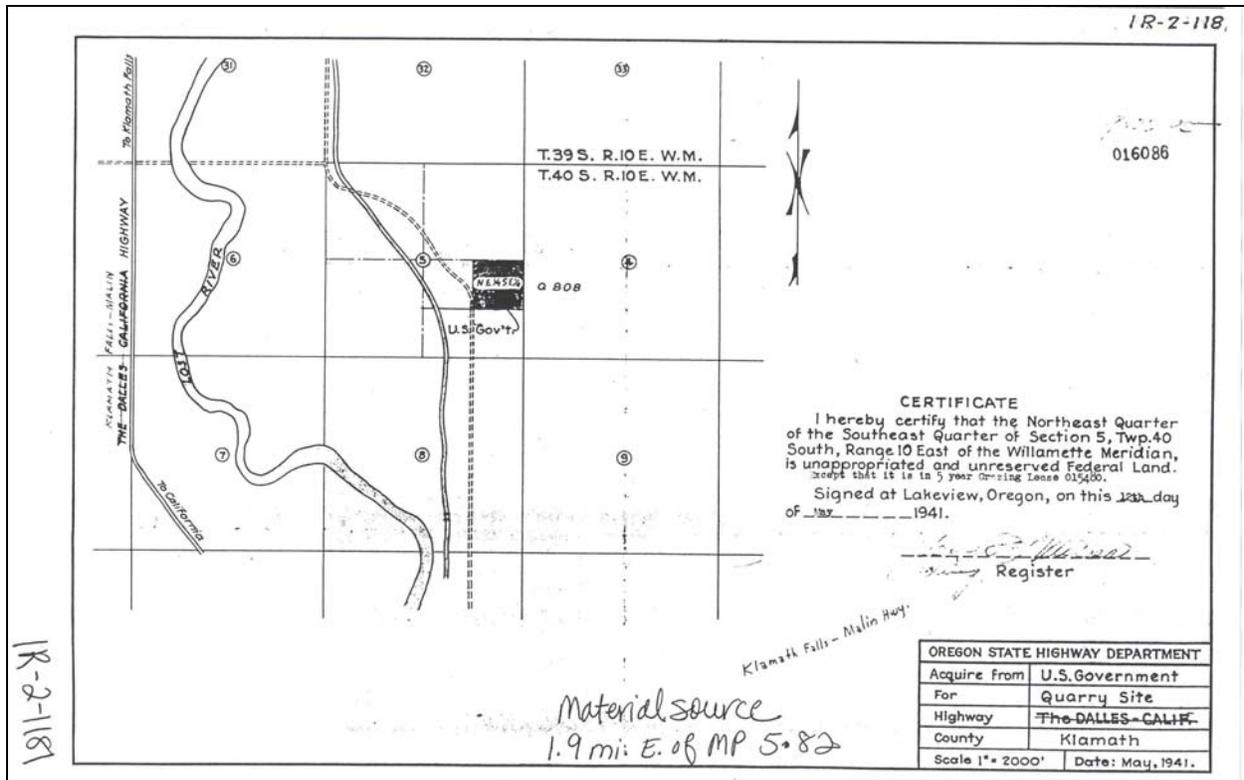
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Klamath	Stukel Mt. Quarry				11	0050	5.45	40S	10.0E	05
File ID		Source #	Date Visited	Map #		Type of Site				
09405		18-037-4	06/22/2000	1R-2-1181		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42°06'55.61855"	121°39'50.28191"	1277.595	40	<20 acres	18-0015					
Comments										
GPS acquired near the gate to the site.										
Rock Type	Unit	Color	Weathering			Jointing				
Basalt/Pyroclastics	Tob	Variable	Decomposing to Slight			Highly Fractured				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Poor			R1 to R2+	155	400,000	837,000				
Potentially Significant Site	Why			Open/Closed	Direction					
No	USA Ground			Closed	West about 400 meters is the levee canal					
Adjacent Land Use										
Farming west across County Road.										
Remarks										
This site is located about 5 miles southeast of Klamath Falls. The ground is adjacent to the east of Hill Road. This site is composed of multiple flows/debris flows that have been block faulted and tilted. The terrain is fairly flat down near the base and increases to about 30 plus degrees as you move up and away from the road. This site is owned by the BLM, but site 18-038-4 is adjacent and ODOT owned.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.32	2.4	24.5	18.8	9.6	19	3.2	19.2	2.2		
Material Use										
AC Base (1986)										

N



Looking to the north at the small pit (left arrow) and the raw land to the east.

Close-up view of the fracture pattern in the volcanic rock with the hammer for scale.



Aerial view of the quarry site (arrow), with the private quarry located north of our ground.

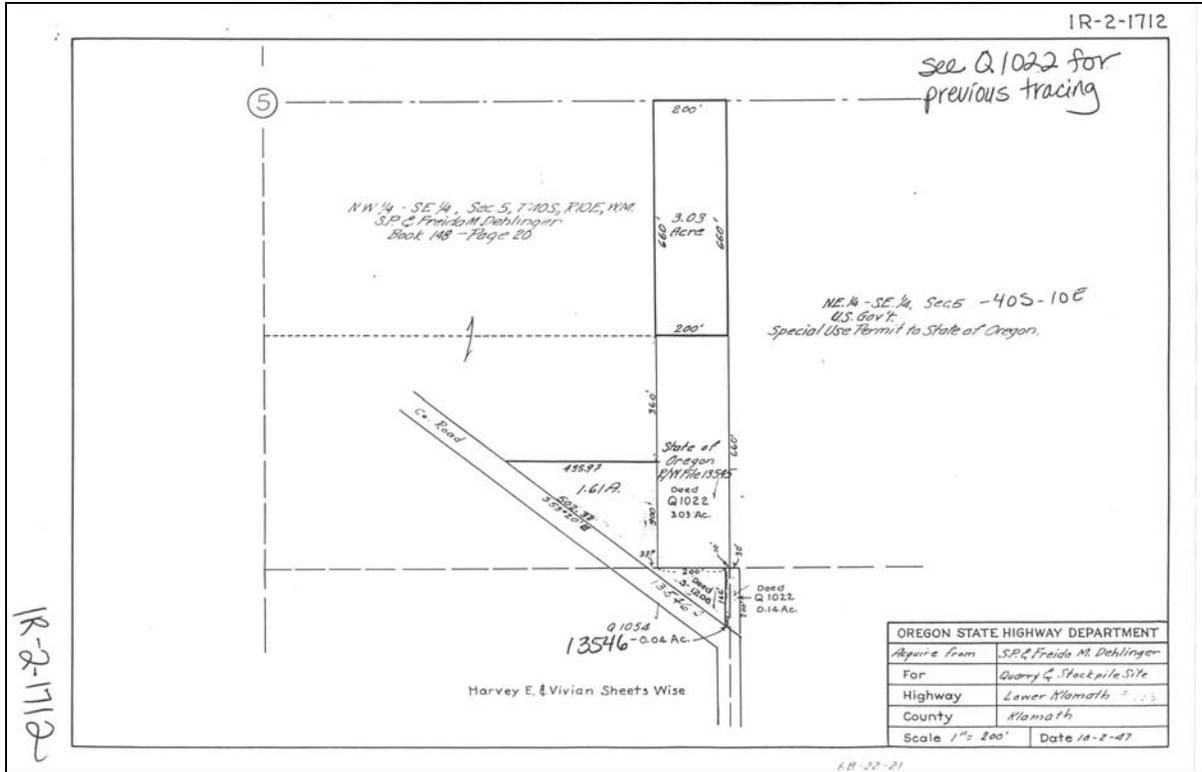
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Klamath	Stukel Mt. Quarry				11	0050	5.45	40S	10.0E	05
File ID		Source #	Date Visited	Map #		Type of Site				
Q1022, 13545, 13546		18-038-4	06/22/2000	1R-2-1712		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42°06'55.61855"	121°39'50.28191"	1277.595	3.21	<2 acres						
Comments										
GPS acquired on site.										
Rock Type	Unit	Color		Weathering			Jointing			
Basalt/Pyroclastics	Tob	Variable		Decomposing to Slight			Highly Fractured			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Poor			R1 to R2+	155						
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	West about 400 meters is the levee canal					
Adjacent Land Use										
Farming west across County Road.										
Remarks										
The rock at this site is a coarse-grain porphyritic basalt. This site is composed of multiple flows/debris flows that have been block faulted and tilted. The terrain is moderately steep to steep about 30 degrees. There are multiple pits and cat cuts up the side of the hill. This site is adjacent to a private quarry. Past disturbances total less than 20 acres. There is room to work but no screening. You can rip the material. There are a lot of fines in the poor quality rock. Some of the pit faces are too tall. This site is ODOT owned but the adjacent site (18-037-4) is BLM owned.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

NW



View to the northwest at the small pit on the site.

Close-up view of the fracture pattern in the volcanic rock.



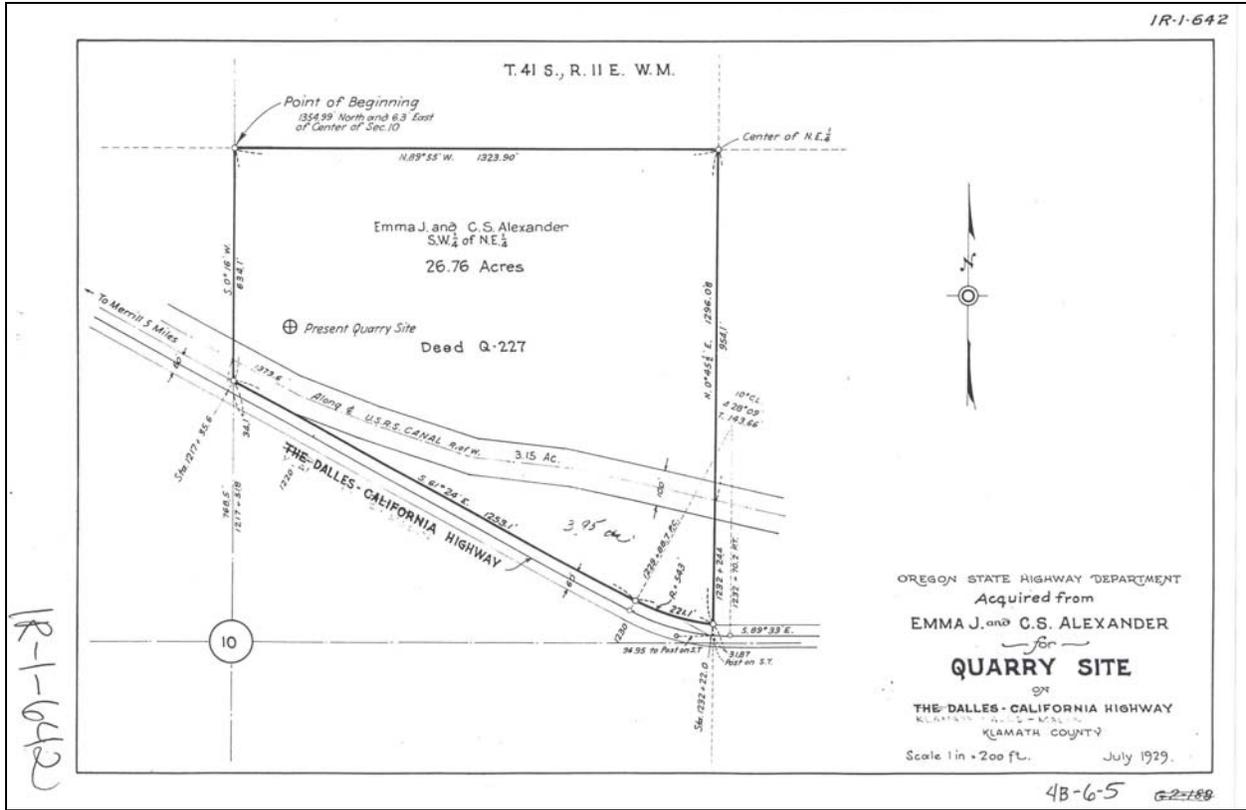
Aerial photograph of the small quarry site and the surrounding area.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Klamath					11	0050	18.6	41S	11.0E	10
File ID		Source #	Date Visited		Map #			Type of Site		
Q0227		18-042-4	06/22/2000		1R-1-642			Quarry		
Latitude		Longitude		Elev. (m)	Acreage		Pit Size	DOGAMI Permit #		
42°01'07.35634"		121°30'42.08322"		1244.222	26.76		<1 acre			
Comments										
GPS acquired along the Canal Levee.										
Rock Type		Unit	Color		Weathering			Jointing		
Basalt		Tob	NA		Variable			Highly Fractured to Massive		
Quality				Hardness	lbs./cu ft.		Reserve (cy)	Reserve (Tons)		
Poor				NA	155		200,000	418,500		
Potentially Significant Site		Why			Open/Closed		Direction			
No		NA			Closed		Irrigation canal bisects the property			
Adjacent Land Use										
Farming Adjacent										
Remarks										
This site is north of the Klamath Falls-Malin Highway. The site has no access from across the canal to the pit. The site is made up of multiple thin flows. If we wish to use this property in the future we will need to develop a new access as it is not accessible to evaluate.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.46	2.6	16.3	6.7	0.9	12.8	0.9				
Material Use										
AC (1983)										

N



View of the small quarry site along the Malin Highway.
Note the irrigation canal between the suburban and the site.



Aerial view of the small quarry site and the irrigation canal to it adjacent.

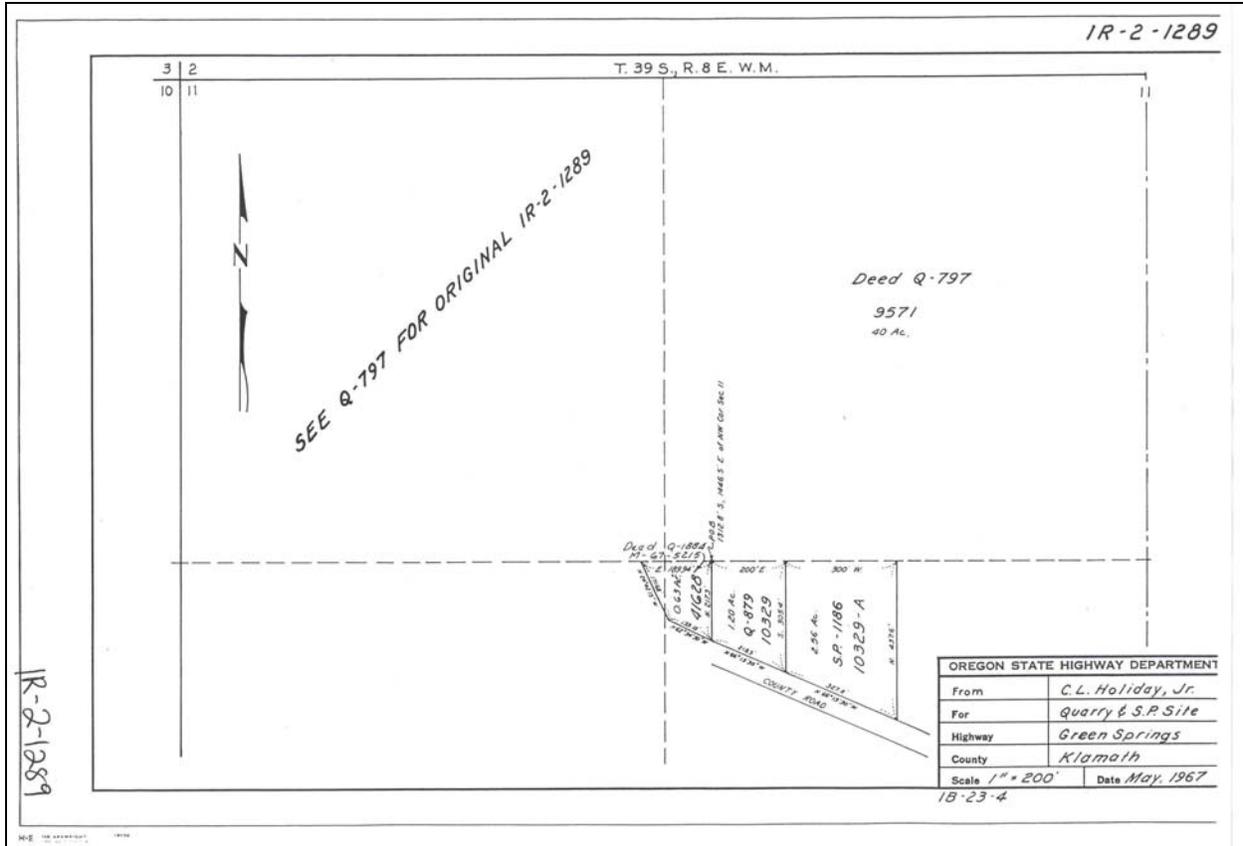
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Klamath	Highway Balsam Quarry			11	0021	58.82	39S	08.0E	11
File ID		Source #	Date Visited	Map #		Type of Site			
09571, 10329, 41628		18-047-4	06/21/2000	1R-2-1289		Quarry			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #				
42°11'44.74264"	121°50'53.13505"	1374.066	41.83	NA	18-0019				
Comments									
GPS acquired at the waste site.									
Rock Type	Unit	Color		Weathering		Jointing			
Basalt	Tob	NA		NA		NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Unknown			NA	155	800,000	1,674,000			
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			NA	NA				
Adjacent Land Use									
Private Quarries to the west, northwest and the east									
Remarks									
This site is north of and adjacent to Balsam Road. The ground is used for a stock pile site and waste site. It appears the ground has been partially reclaimed. The east and northeast side of the site is all natural. There were no exposures to evaluate the rock.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
	2.81	17.0			15.6	.4			
Material Use									
(1968)									

N



Looking to the north at the disturbed ground beyond the vehicle.

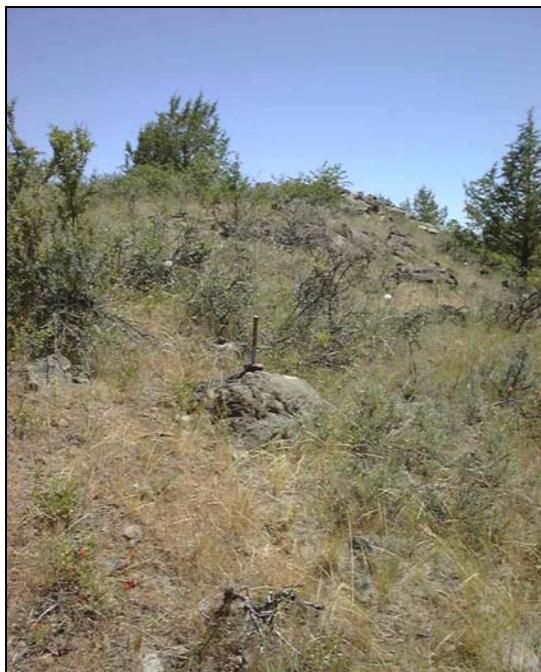
View to the west/southwest at the property along the hill.



Aerial view of the small pit and the raw land to the north and northeast.
Private quarry is adjacent to the west.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Klamath	Long Lake Quarry				11	0021	58.82	39S	08.0E	11, 12
File ID		Source #	Date Visited	Map #		Type of Site				
01759, 01758		18-049-4	06/21/2000	1R-1-1387		Raw Land				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42°11'27.73234"	121°50'12.26015"	1297.805	8	NA	18-0102					
Comments										
GPS acquired on the ground.										
Rock Type	Unit	Color		Weathering		Jointing				
Basalt	Tob	Medium Grey (N5)		Fresh		NA				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good			R3+	164	250,000	553,500				
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	NA					
Adjacent Land Use										
Ranching adjacent										
Remarks										
This site is adjacent to Balsam Road. This is raw land with no visible exposures. The basalt float is a fine-grain fresh looking rock, with a little staining. There is limited to no screening with some room to work. There could be some overburden on this fairly flat ground. We may be able to rip the material.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.68	2.7	18.4	3.5	3.4			21.6	.5		
Material Use										
Base AC (1991)										

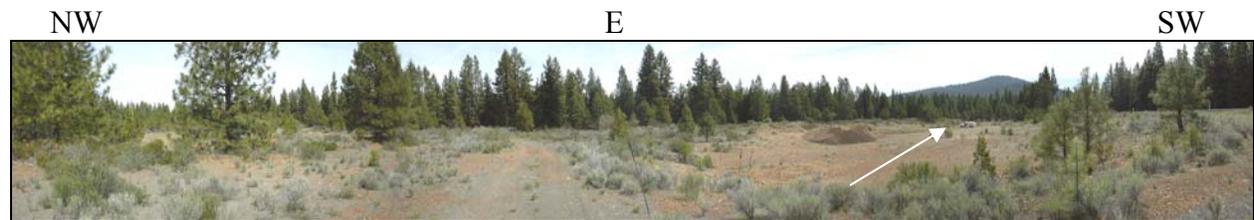
N



View to the north of this raw land site located adjacent to Balsam Road.

Close-up view of the ground at the site with the hammer for scale.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Klamath	Odessa Gravel Pit				11	0270	50.9	37S	07.0E	05
File ID		Source #	Date Visited		Map #			Type of Site		
NA		18-052-4	05/08/2001		1R-5-64			Borrow		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42°23'07.95974"	122°00'49.64064"	1271.242	28.01	<5 acres	18-0122					
Comments										
GPS acquired in the pit										
Rock Type	Unit	Color		Weathering			Jointing			
Volcanic Gravel	Qal	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)		Reserve (Tons)			
Good to Fair			NA	120	320,000		518,400			
Potentially Significant Site	Why			Open/Closed	Direction					
Maybe	Large Acreage, quantity			Closed	Upper Klamath Lake is 450 meters to the east					
Adjacent Land Use										
Open Space/ Ranching										
Remarks										
This site is adjacent to and east of Highway 140. This ground is a borrow site, with the material composed of 15% cobble size, 45% pebble size, and 60% sand/silt size gravel. There is room to work, but no screening from the highway. No fence or gate. Minor amount of small (35 feet) pine trees.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
		24.5					38.0	8.1		
Material Use										
(1962)										



Panoramic view of the borrow site that is adjacent to Highway 140, arrow points to the suburban



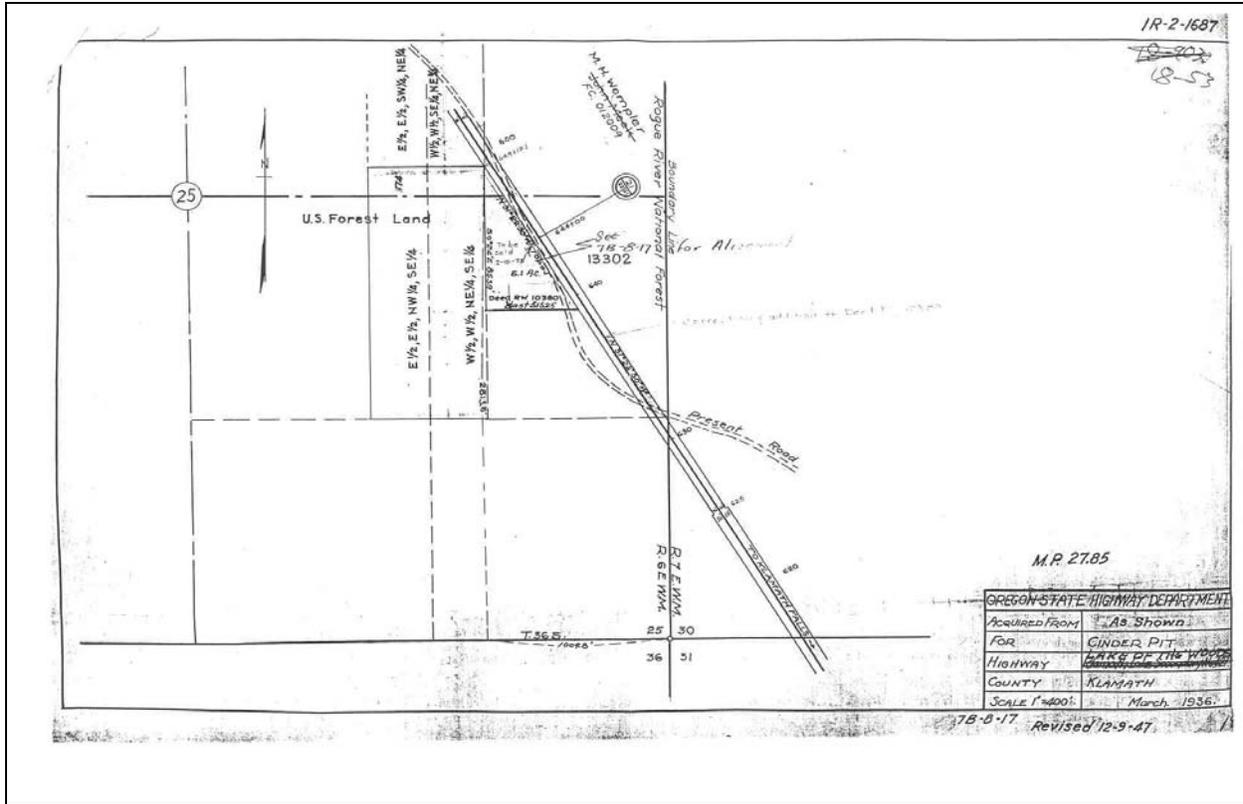
Close-up view of the volcanic gravel at this location with the hammer for scale.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Klamath				11	0270	47.68	36S	06.0E	25
File ID		Source #	Date Visited	Map #			Type of Site		
13302		18-053-4	06/21/2000	1R-2-1687			Cinder Pit		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
42°24'33.55703"	122°03'20.54191"	1276.964	5.1	<1 acre					
Comments									
GPS acquired along Highway 140 and the cinder site.									
Rock Type	Unit	Color		Weathering			Jointing		
Cinder	QTp	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Good			NA	120	50,000	81,000			
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA				NA				
Adjacent Land Use									
Open space/Ranching									
Remarks									
Good clean source of cinders along Highway 140. Adjacent to larger land tract (Forest Service). This site is overgrown with trees and appears not to be in use anymore. There have been some trees removed close too or on the property.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
	2.64	37.2							
Material Use									
Sanding Material (1957)									

W



View of the small cinder pit along Highway 140.



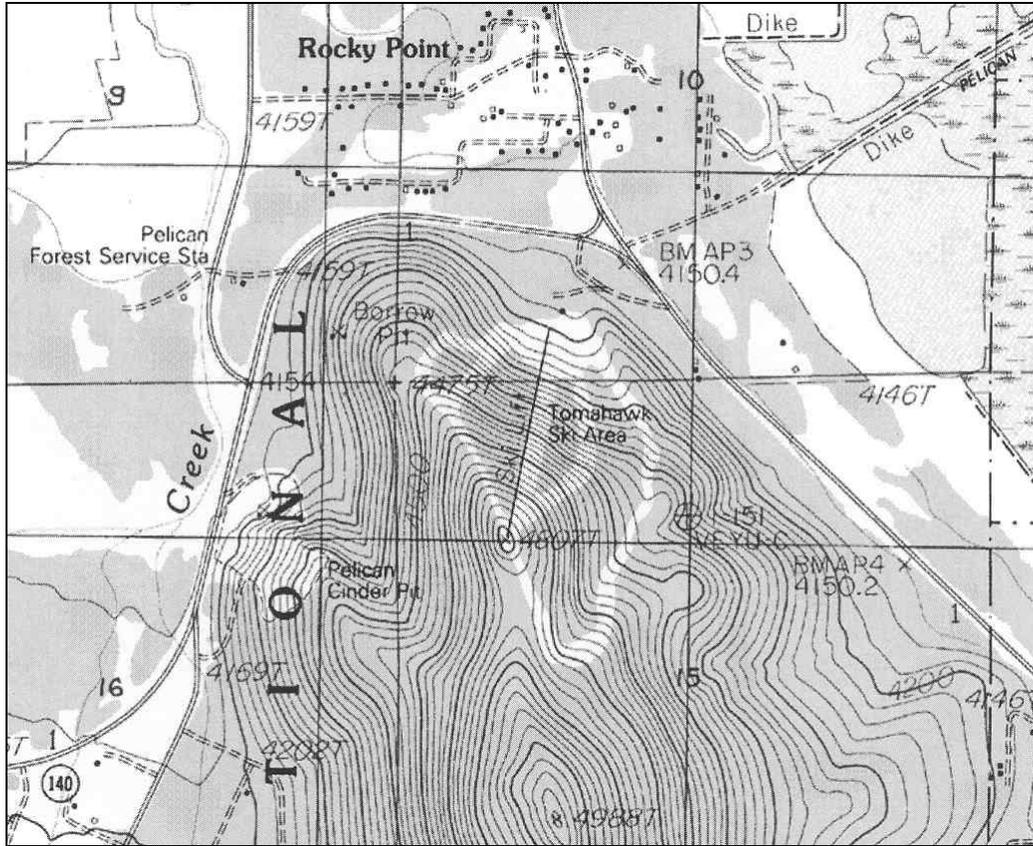
Aerial view of the small cinder pit in relation to the surrounding area.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Klamath	Wampler Cinder Pit				11	0270	41.8	36S	06.0E	16
File ID		Source #	Date Visited	Map #		Type of Site				
		18-054-4	06/21/2000	NA		Cinder Pit				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42°26'35.00751"	122°6'56.43277"	1271.481	40	<20 acres	18-0063					
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	484,000	784,080				
Potentially Significant Site	Why			Open/Closed	Direction					
No	Leased Ground			NA	NA					
Adjacent Land Use										
Open space										
Remarks										
This is a cinder pit adjacent to the south of Highway 140. The cinder at this site is a good clean homogenous size. Easy to screen with little rejects or waste. Some of ground is used as a waste site. Locked gate to the entrance. The ground here is partially leased from the Forest Service and the other part from a private source. Unknown acreage size.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

SE



View of this large cinder site located at the junction of Highway 140 and the road to Pelican Bay.



Aerial view of this cinder site along Highway 140.

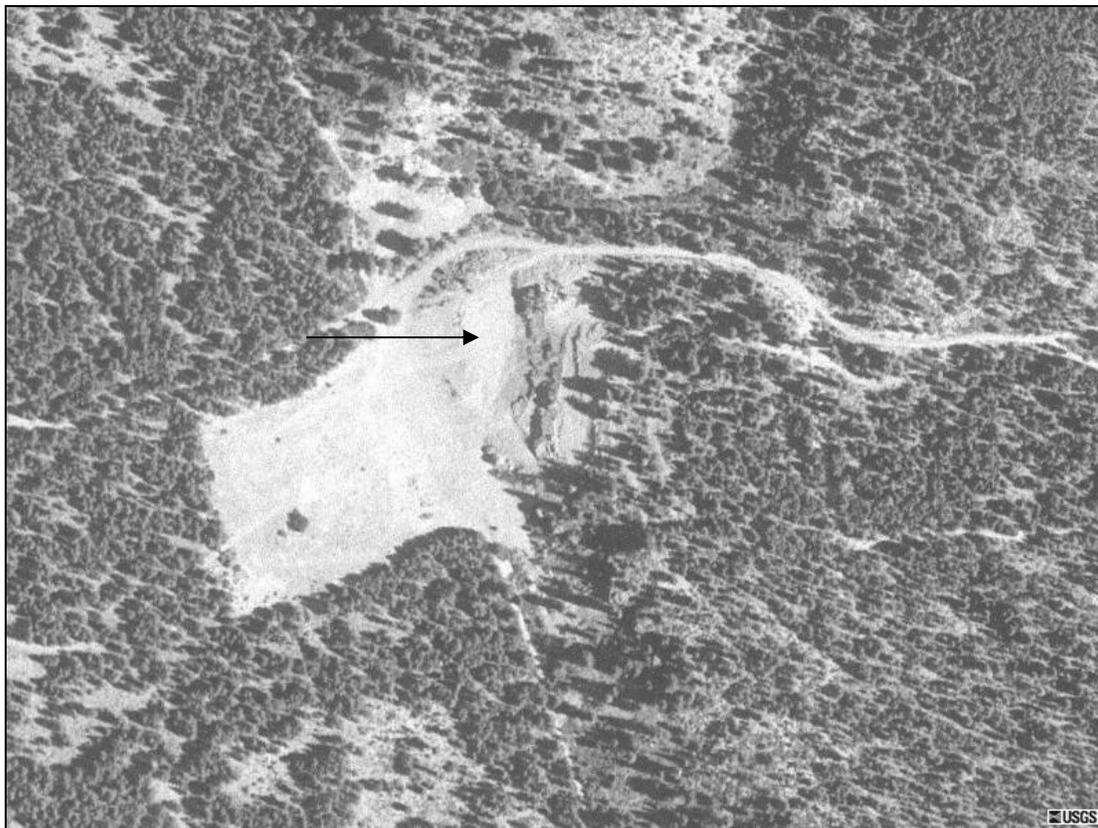
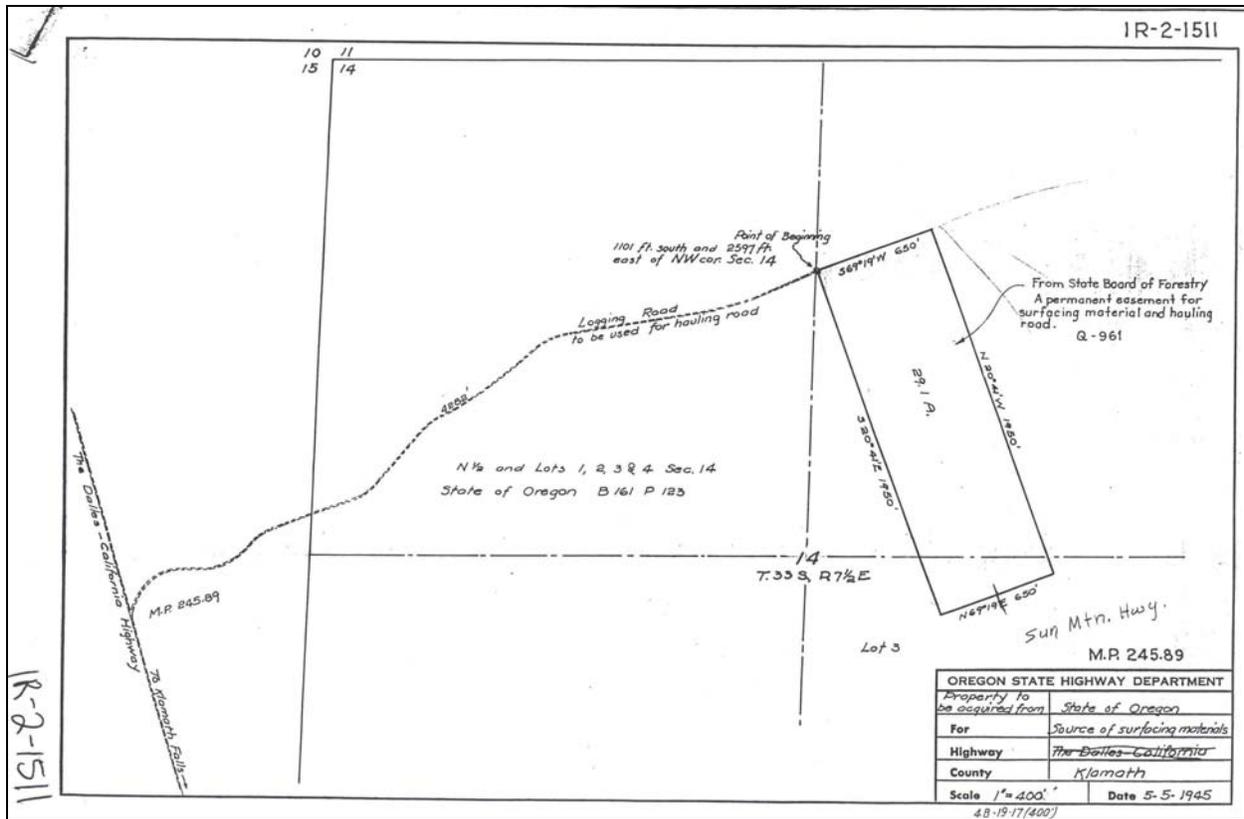
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Klamath	Sun Mt. Quarry				11	0004	25.75	33S	07.5E	14
File ID		Source #	Date Visited	Map #		Type of Site				
11838		18-060-4	06/29/2000	1R-2-1511		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42°42'57.32050"	121°57'53.62419"	1326.406	29.1	<2 acres						
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color		Weathering		Jointing				
Basalt	Tps	Medium Light Grey (N6)		Fresh to Decomposing		Highly Fractured				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good to Fair			R3+	183	200,000	494,100				
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	NA					
Adjacent Land Use										
Open space										
Remarks										
To get to the site take Highway 232 north off of Highway 62, then go east on Forest Service road # 6214 about one mile. The rock is a fine-grain light colored basalt. The quarry is situated along a fault scarp. The basalt is highly fractured and platy with some decomposing zones intermittently dispersed. There is ample room to work and good screening. You can rip the material. There will be some overburden. This ground is owned by State Forestry. No record at the County Assessors office.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.550	2.58	20.5	1.4	.4			9.4	.2		
Material Use										
AC (1991)										

E



View to the east of the upper pit.

Close-up view of the highly fractured volcanic rock with the hammer for scale.



Aerial view of the quarry site located east of Klamath Agency.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Klamath				11	0022	96.14	34S	07.5E	12
File ID		Source #	Date Visited	Map #			Type of Site		
Q0109, 06175		18-085-4	07/13/2000	1R-1-516, 1R-2-630			Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
42°37'59.51638"	121°56'12.61111"	1276.575	8.3	<1 acre					
Comments									
GPS acquired at the stock pile site.									
Rock Type	Unit	Color		Weathering			Jointing		
Andesite	Tvm	Light Grey (N7)		Fresh			Highly Fractured to Massive		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Poor to Fair			R3	155					
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			Closed	NA				
Adjacent Land Use									
Ranching across Highway									
Remarks									
This site is adjacent to Highway 62 on the east side. The rock is a mix of andesite and scoriaceous basalt with minor vesicular basalt. The andesite is platy and a minor player. The terrain is very steep (30 degrees plus) and along the old alignment. There is a stockpile site and grindings here as well. Minor room to work with no screening. I see no value for AC or PCC. Possible fill or shoulder rock only. Some rip rap at this location. If work is to be done at this site we should bench from the top down. We have created a dangerous work zone next to the face.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
	2.86	27.2			20.08	.6			
Material Use									
Base, AC and Oil Rock (1961)									

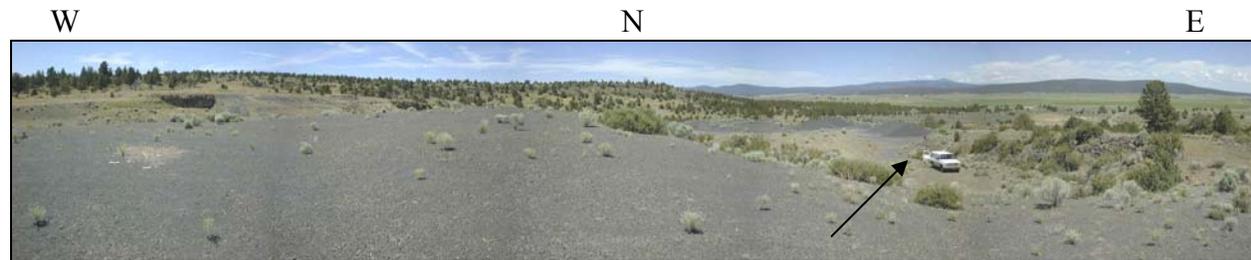
E



View to the east of this very tall pit face along Highway 62. Note the variable lithologies exposed at the face.

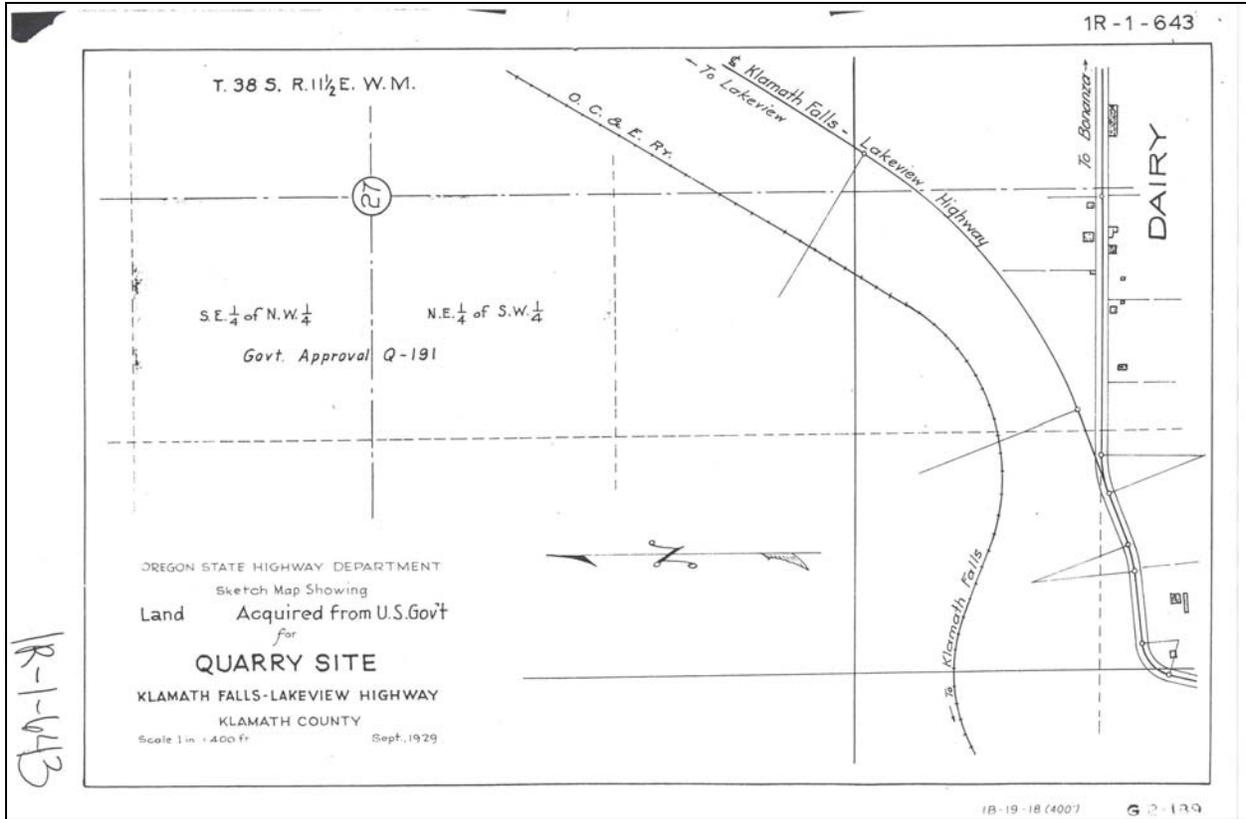
Close-up view of some of the volcanic rocks at this location with the hammer for scale.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Klamath	Dairy Quarry				11	0020	19.68	38S	11.5E	27
File ID		Source #	Date Visited	Map #		Type of Site				
Q0191		18-090-4	06/22/2000	1R-1-643		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42°14'55.58325"	121°31'01.99755"	1316.084	80	<2 acres	18-0007					
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color		Weathering		Jointing				
Basalt	Tb	Medium Dark Grey (N4)		Fresh to Very Slight		Highly to Moderately Fractured				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good to Fair			R3	163						
Potentially Significant Site	Why			Open/Closed	Direction					
No	USA Ground			Closed	NA					
Adjacent Land Use										
Farming/ With one residence adjacent to the east										
Remarks										
This is medium-grain basalt with up to 10% phenocrysts of plagioclase. Some phenocryst going to clays. Plenty of room to work with good screening. You can rip the rock into a good size to crush. The terrain is gradual. Klamath County works the west side (40ac) of the ground. The leased ground from the BLM has up to a million cubic yards of material but will need an assessment before we can remove any rock. There appears to be cultural material near this site. USA ground.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.64	2.67	17.1	2.4	.4			19.4	.4		
Material Use										
Base, AC (1992)										



Panoramic view of this quarry site northwest of Dairy, OR. Note the suburban for scale.

Close-up view of the fracture pattern within the basalt, note the hammer for scale.

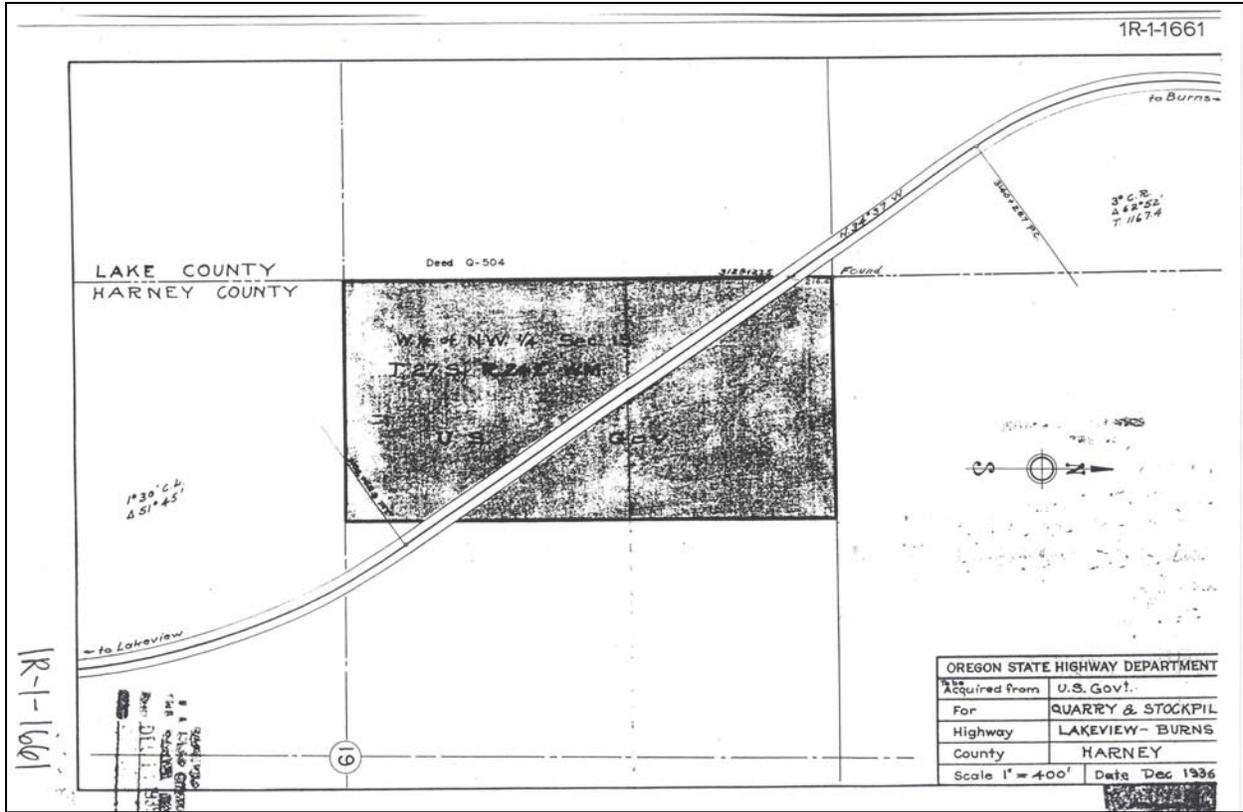


Aerial view of the quarry site (left arrow) and the stock pile site (right arrow) adjacent to Highway 140.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Klamath					11	0004	0	35S	07.0E	21
File ID		Source #	Date Visited	Map #		Type of Site				
06873		18-901-4	06/29/2000	1R-2-547		Borrow				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42°31'42.32000"	121°53'18.15000"	1470	7.27	<6 acres						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color	Weathering		Jointing					
Volcanic Gravel	NA	NA	NA		NA					
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair to Good			NA	120	80,000	129,600				
Potentially Significant Site	Why	Open/Closed		Direction						
No	NA	Closed		To the south about 400 meters is the Williamson River						
Adjacent Land Use										
Commercial/cemetery adjacent										
Remarks										
This site is located west of Highway 62. The ground has had past disturbances which have re-vegetated on their own. The volcanic gravel varies in size and shape, with 60% gravel and 40% sand/silt. There is no access anymore. No screening, but ample room to work. The adjoining 20 acre lot is in question of ownership. County Records do not show us as the owners. No record at the County Assessors office.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



Aerial view of the borrow site located north of the Williamson River and west of Highway 62.



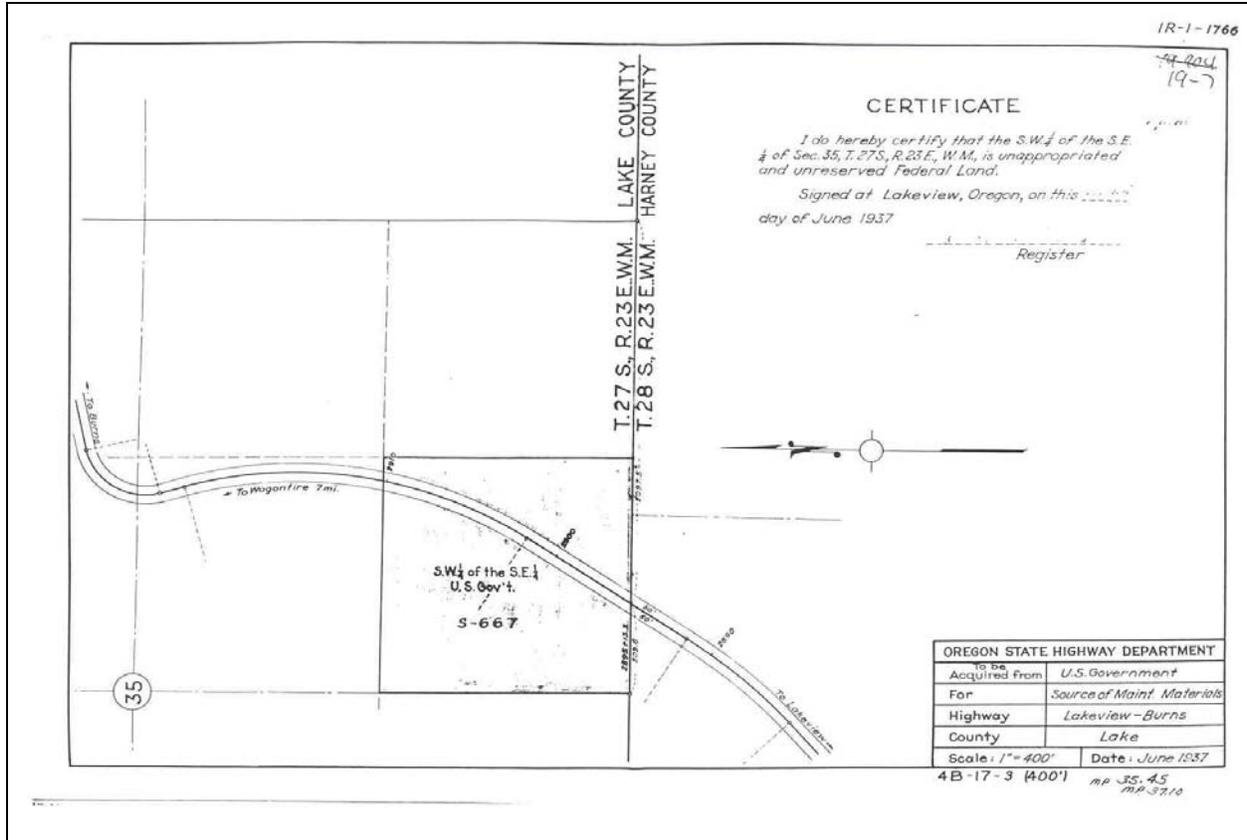
Aerial view of the small borrow site and the surrounding area that Highway 95 bisects.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Lake				11	0049	35	27S	23.0E	35
File ID		Source #	Date Visited	Map #			Type of Site		
SP667		19-007-4	07/19/2000	1R-1-1766			Raw Land		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
43°10'45.34000"	119°55'27.99000"	1384	40	NA					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
Rhyolite	Tat	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
NA			NA	120					
Potentially Significant Site	Why			Open/Closed	Direction				
No	USA Ground			Closed	NA				
Adjacent Land Use									
Open space									
Remarks									
This site is located adjacent to Highway 395, near the Lake/Harney County line. There is no visible disturbance at this location. The lithology in the area is rhyolite with minor basalt exposed on the hillside. USA ground.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
	2.48	25.5			19.61	.5			
Material Use									
Surfacing Base, AC, Oiling Aggregate (1961)									

N E S



Panoramic view of the raw land site that Highway 395 bisects.



Aerial view of the raw land site located adjacent to Highway 395.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Lake				11	0049	37	28	23.0E	12
File ID		Source #	Date Visited	Map #			Type of Site		
32415		19-008-4	07/19/2000	1R-1-1246			Borrow		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
43°09'22.81990"	119°57'00.01728"	1346.041	80	<3 acres		19-0062			
Comments									
GPS acquired in the pit.									
Rock Type	Unit	Color		Weathering			Jointing		
Volcanic Gravel	Qs	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Fair to Poor			NA	120	645,000	1,044,900			
Potentially Significant Site	Why			Open/Closed	Direction				
No	USA Ground			Closed	NA				
Adjacent Land Use									
Open space									
Remarks									
This site is east and south of Highway 395. The material is composed of a heterogeneous mix of size and shape of 90% rhyolitic gravel and 10% sand with minor basaltic gravel. There is good screening and ample room to work. The terrain is fairly flat. The ground we have on the north side of the highway is below the road by about 12 feet. This site is also used for a stockpiling and waste rock. USA ground.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
2.17	2.25	23.31	8.2	2.9	11.4	.7	12.8	.6	
Material Use									
Chip Seal (1983)									

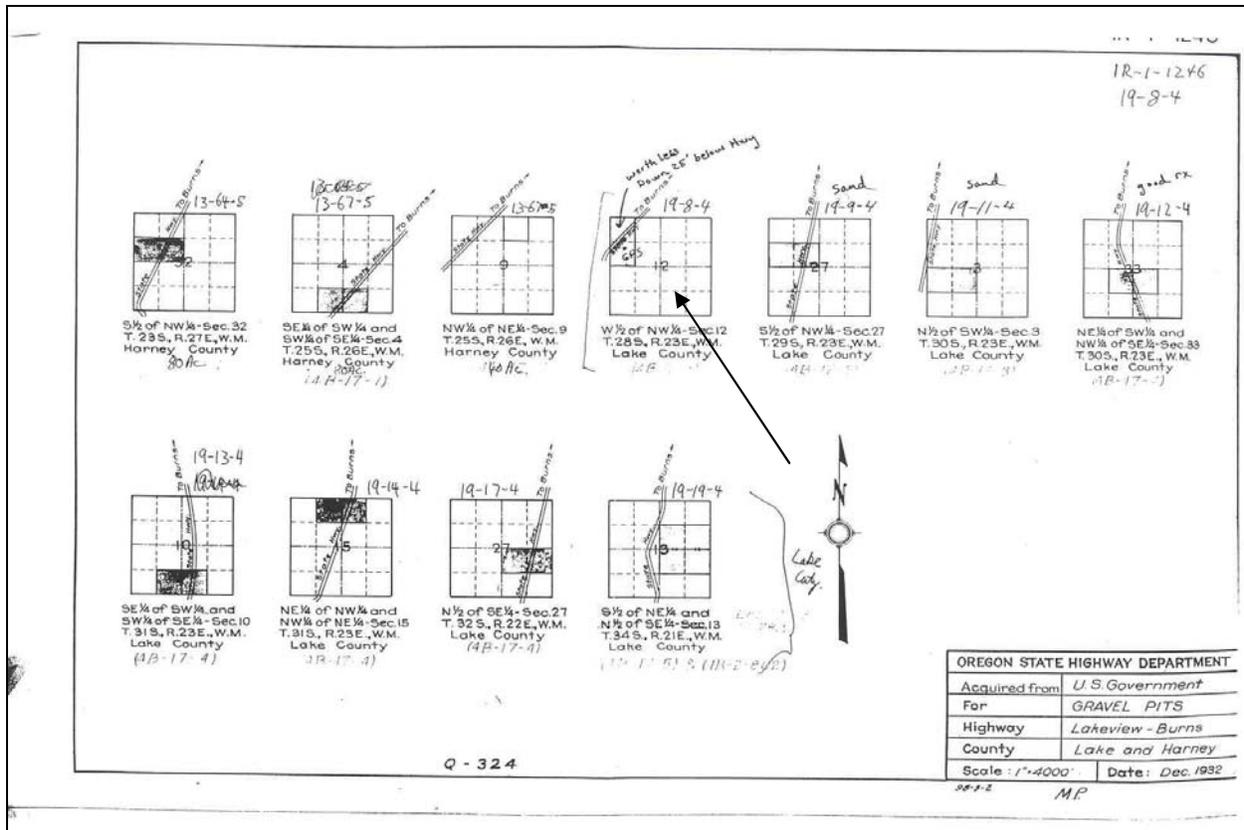
W

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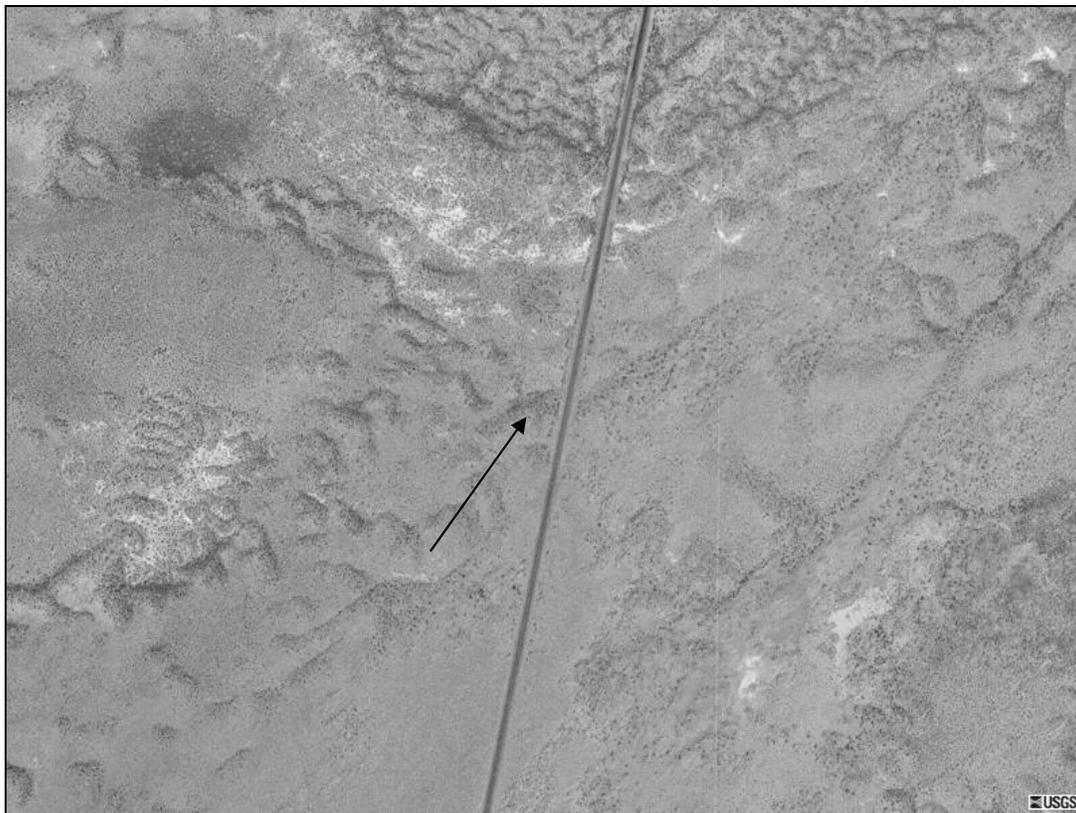
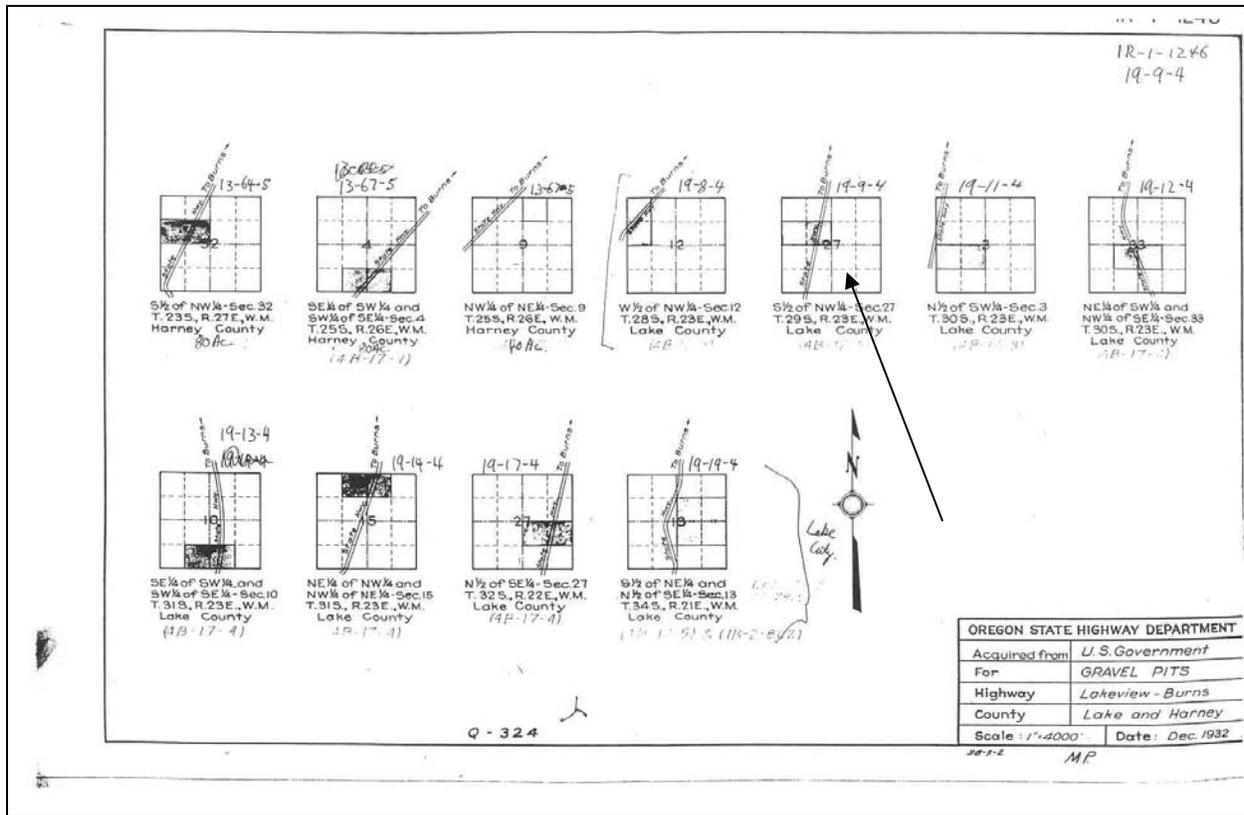


Panoramic view of the borrow site located adjacent to Highway 395.

Close-up view of the volcanic gravel at this location.



Aerial view of the general area of the borrow site along Highway 395.



Aerial view of the raw land site and the surrounding ground along Highway 395.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Lake				11	0049	49	30S	23.0E	04
File ID		Source #	Date Visited	Map #			Type of Site		
Q0503		19-010-4	07/19/2000	1R-1-1659			Raw Land		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
42°59'47.54000"	119°59'30.64000"	1309	40	NA					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
Sand	Qd	NA.		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
NA			NA	120					
Potentially Significant Site	Why			Open/Closed	Direction				
No	USA Ground			NA	NA				
Adjacent Land Use									
Open space									
Remarks									
This is raw land on the west side of Highway 395. The material is sand derived from Alkali lake to the southwest. USA ground.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
	2.52	20.0							
Material Use									
Gravel, Base, Oiling and Asphalt Concrete (1942)									

NW



View to the northwest of the raw land site along Highway 395.



Aerial view of the site along Highway 395.

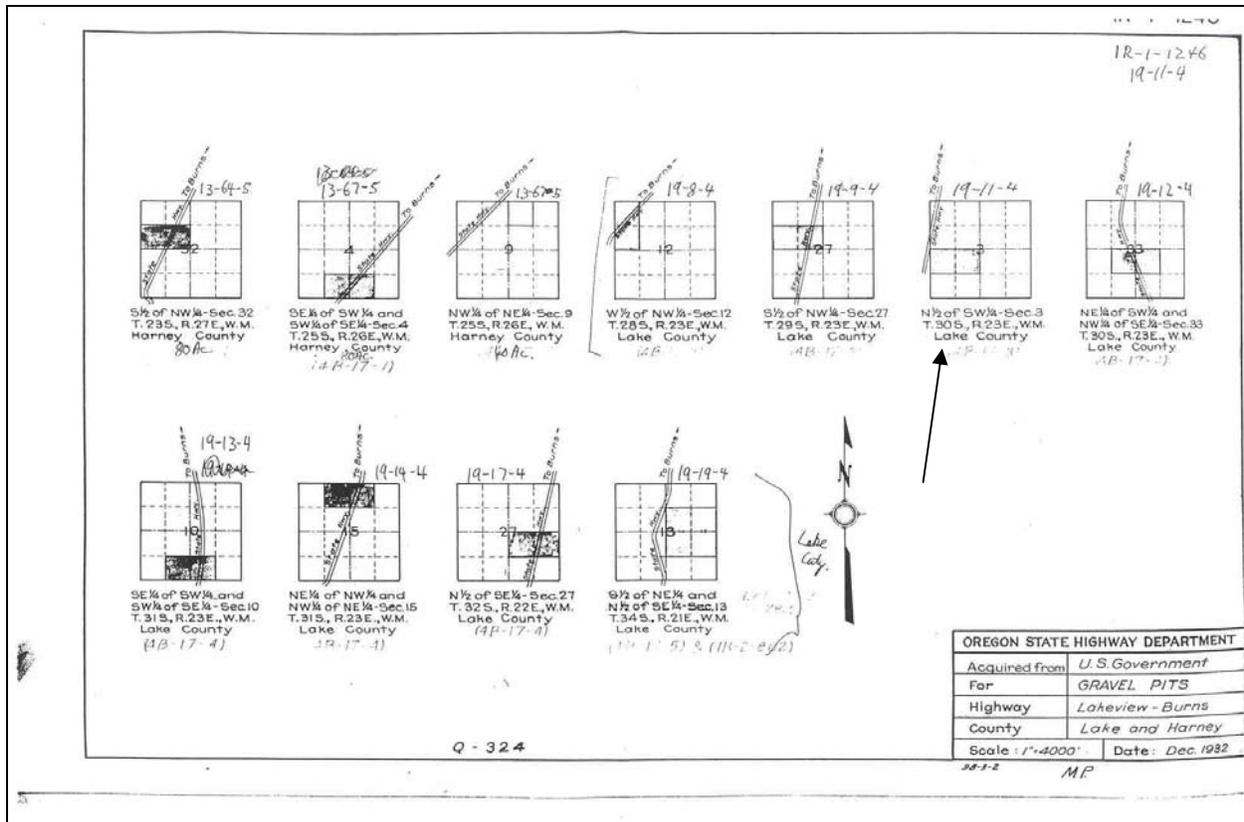
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Lake	Lehman Cow Camp Pit			11	0049	48.7	30S	23.0E	03
File ID		Source #	Date Visited	Map #		Type of Site			
32415, Q0324		19-011-4	07/19/2000	1R-1-1246		Quarry			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #				
42°59'39.53949"	119°59'12.76189"	1340.014	80	<20 acres	19-0094				
Comments									
GPS acquired in the pit.									
Rock Type	Unit	Color		Weathering		Jointing			
Rhyolite	Tsv	Very Light Grey (N8)		NA		NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Good			R3	149	645,000	1,297,418			
Potentially Significant Site	Why			Open/Closed	Direction				
No	USA Ground			Closed	NA				
Adjacent Land Use									
Open space /ranch adjacent north									
Remarks									
This site is adjacent to the east of Highway 395. The material appears to come from a colluvial deposit of talus and gravel near the range front. The rock is composed of a homogeneous lithology and a heterogeneous mix of size and shape. The largest being around cobble size. There is about 20% sand mixed in. There are multiple stock piles with ample room to work and good screening from the highway. There appears to be about 20acres of ground left to remove material from. The rock is loose and can be scooped to process. This is an important site along this stretch of road. USA ground.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
2.3	2	19.1	1.8	.2	15.5	.9	6.2	.1	
Material Use									
AC (1992)									



Panoramic view of the large quarry site located east of Highway 395.



Close-up view of the colluvium at this site.



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

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Lake				11	0049	53.88	30S	23.0E	33
File ID		Source #	Date Visited	Map #			Type of Site		
32415		19-012-4	07/19/2000	1R-1-1246			Borrow		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #				
42°55'21.29494"	120°00'02.01596"	1318.82	80	<1 acre					
Comments									
GPS acquired on the east side of Highway 395.									
Rock Type	Unit	Color		Weathering			Jointing		
Volcanic Gravel	Qs	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Fair			NA	120					
Potentially Significant Site	Why			Open/Closed	Direction				
No	USA Ground			Closed	NA				
Adjacent Land Use									
Open space									
Remarks									
This site is on either side of Highway 395. The west side has prismodal (<5cm) volcanic gravel (50%) and sand (50%). The east side has a large fault block composed of basalt flows and a talus slope at the base. There is room to work but no screening. The terrain is flat to the west and a cliff to the east. There is a large quantity of material here. USA ground. This site will need an assessment done for any further use.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
	2.45	32.7							
Material Use									
Surfacing Base and Top Course (1958)									

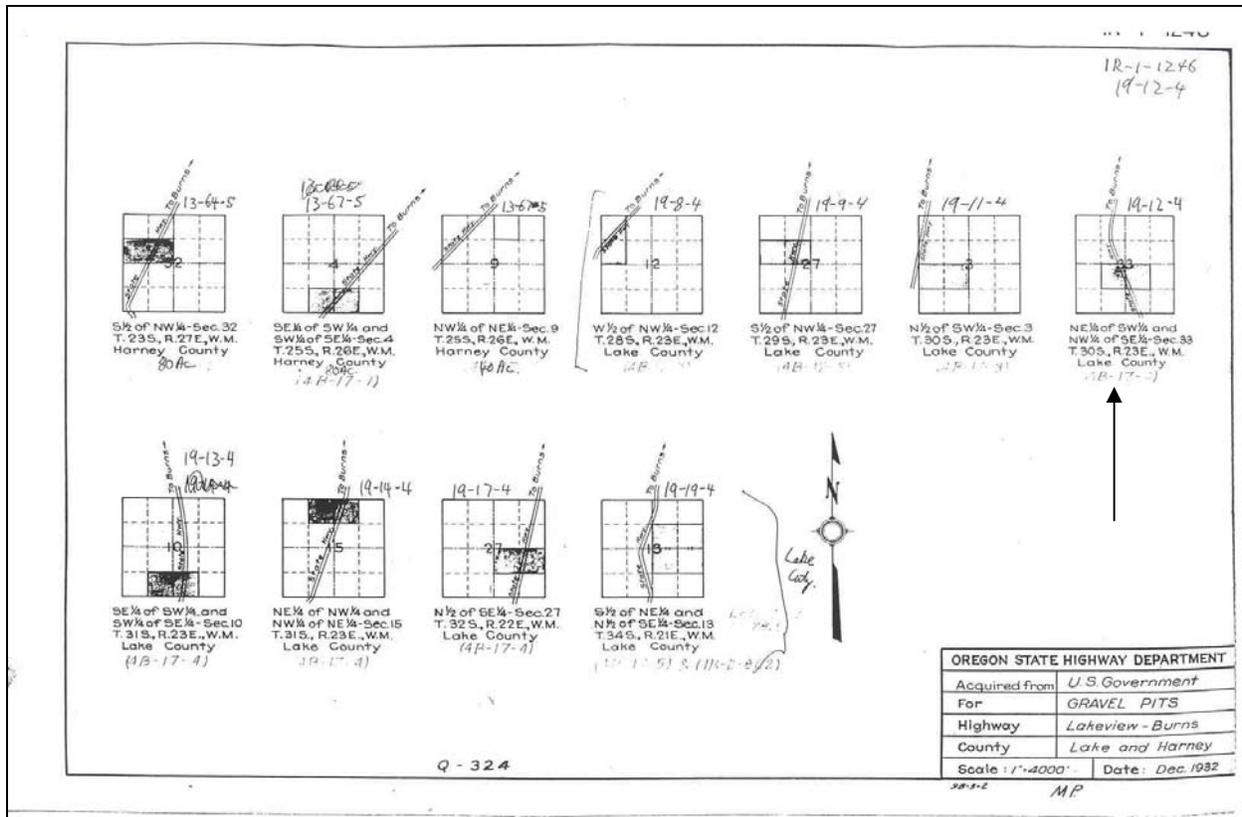
S

W



Panoramic view of the borrow site and the surrounding area.

Close-up view of the material at this location.



Aerial view of the borrow site on either side of Highway 395.

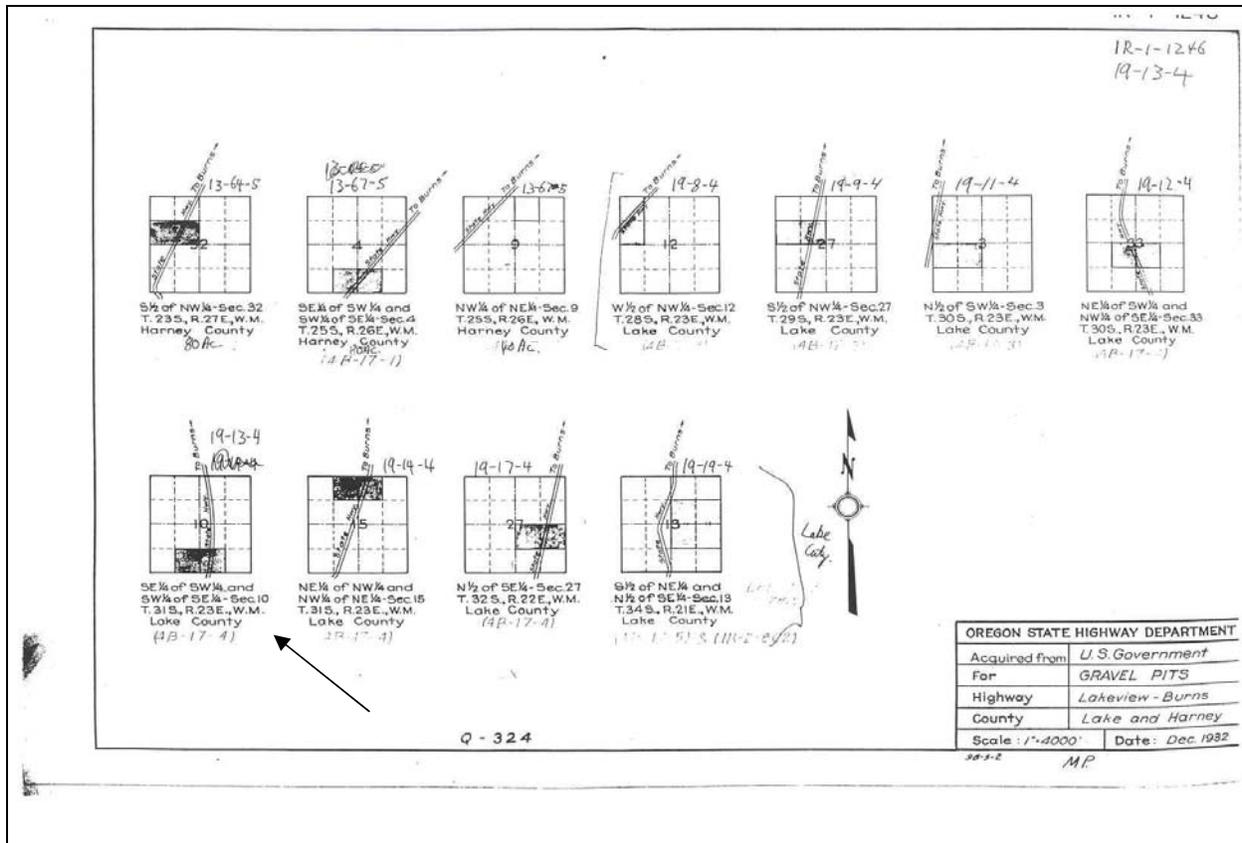
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Lake					11	0049	56.42	31S	23.0E	10
File ID		Source #	Date Visited	Map #		Type of Site				
32415, Q0324		19-013-4	07/19/2000	1R-1-1246		Raw Land				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42°53'43.74000"	119°59'29.22000"	1340	80	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
Volcanic Rock	Qs	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair			NA	120						
Potentially Significant Site	Why			Open/Closed	Direction					
No	USA Ground			NA	NA					
Adjacent Land Use										
Open space										
Remarks										
This raw land site is on either side of Highway 395. The terrain is gradual to moderate on the west side and vertical cliffs on the east side. There is a mix of lithologies ranging from volcanic gravel, rhyolite, and basalt flows. There is ample room to work but no screening from the highway. USA ground.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



360 degree view of the rawland site and the surrounding area along Highway 395.



Close-up view of the colluvium at this site.



Aerial view of the raw land site along Highway 395, note the borrow site west of the road.

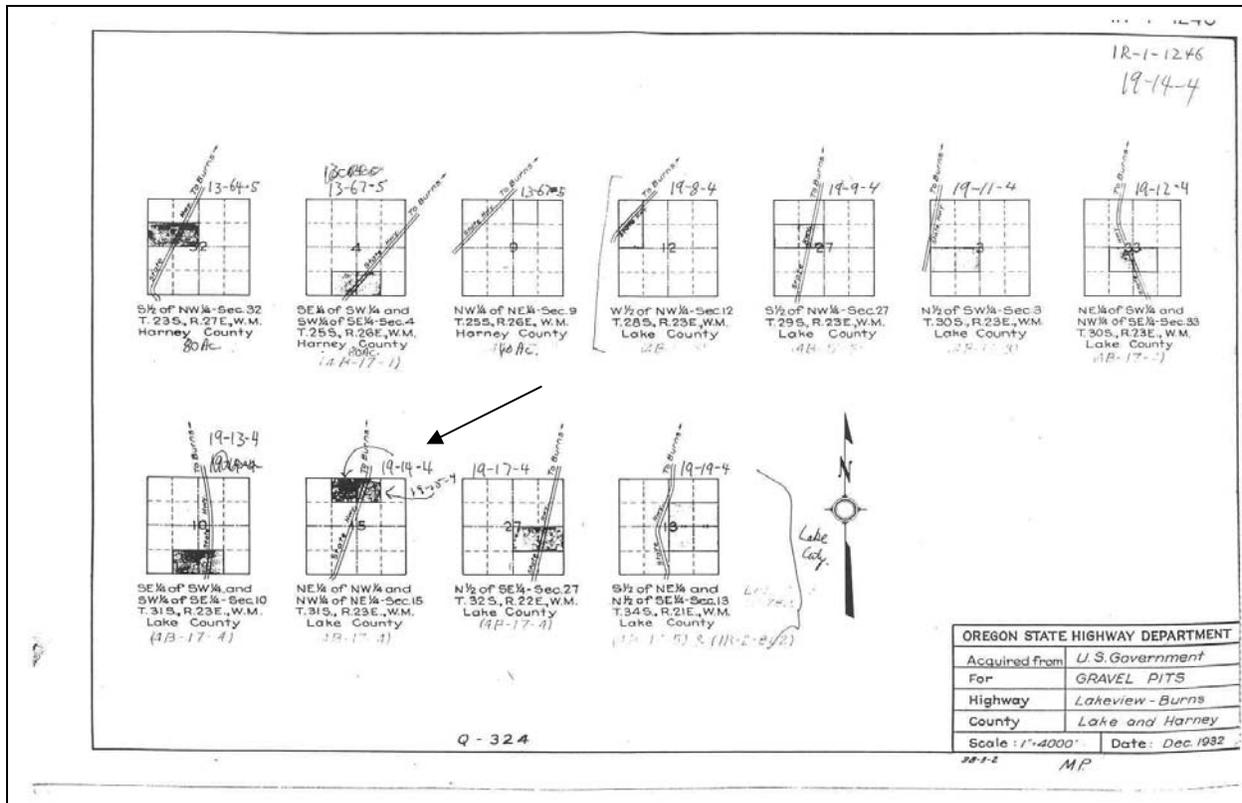
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Lake					11	0049	56.42	31S	23.0E	15
File ID		Source #	Date Visited	Map #		Type of Site				
32415, Q0324		19-014-4	07/19/2000	1R-1-1246		Raw Land				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42°53'33.73000"	119°59'34.60000"	1340	80	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
Volcanic	Qs	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair			NA	120						
Potentially Significant Site	Why			Open/Closed	Direction					
No	USA Ground			NA	NA					
Adjacent Land Use										
Open space										
Remarks										
This is a raw land site located on either side of Highway 395. The terrain is gradual to moderate on the west side and vertical cliffs on the east side. There is a mix of lithologies ranging from volcanic gravel, rhyolite, and basalt flows. There is ample room to work but no screening from the highway. USA ground.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



Panoramic view of the terrain at this location, note the Steens basalt in the center of the image.

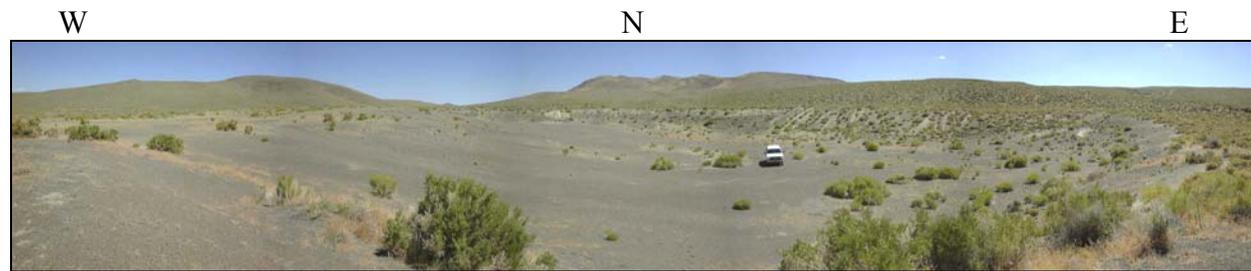


Close-up view of the colluvium at this location.



Aerial view of the terrain along Highway 395.

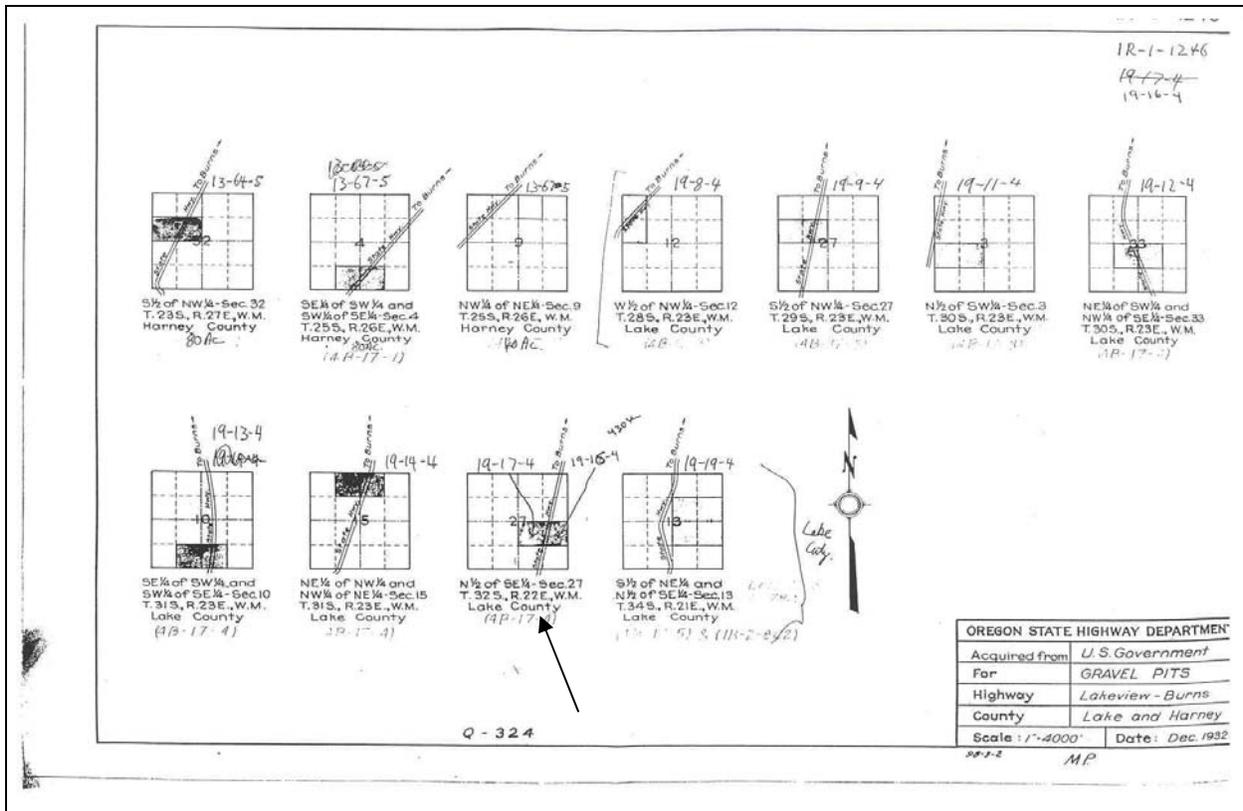
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Lake				11	0049	64	32S	22.0E	27
File ID		Source #	Date Visited	Map #			Type of Site		
32415, Q0324		19-016-4	07/19/2000	1R-1-1246			Borrow		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
42°45'50.19817"	120°06'22.13335"	1359.689	40	<3 acres					
Comments									
GPS acquired in the pit on the west side.									
Rock Type	Unit	Color		Weathering			Jointing		
Volcanic Gravel	Qs	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Fair			NA	120					
Potentially Significant Site	Why			Open/Closed	Direction				
No	USA Ground			Closed	NA				
Adjacent Land Use									
Open space									
Remarks									
This site is located on the east side of Highway 395. Site 19-017-4 is located west of and adjacent to this site. The material is composed of a heterogeneous mix of size and shaped gravel. About 60% by volume gravel and 40% sand. There is plenty of room to work with limited screening. The terrain is fairly flat. USA ground.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
2.05	2.24	35.4	15.3	3.3	16.8	1.2	25.7	3.4	
Material Use									
(1975)									



View to the north looking at the borrow site east of and adjacent to Highway 395.



Close-up view of the material at this location.



Aerial view of the borrow site located on the east side of Highway 395.

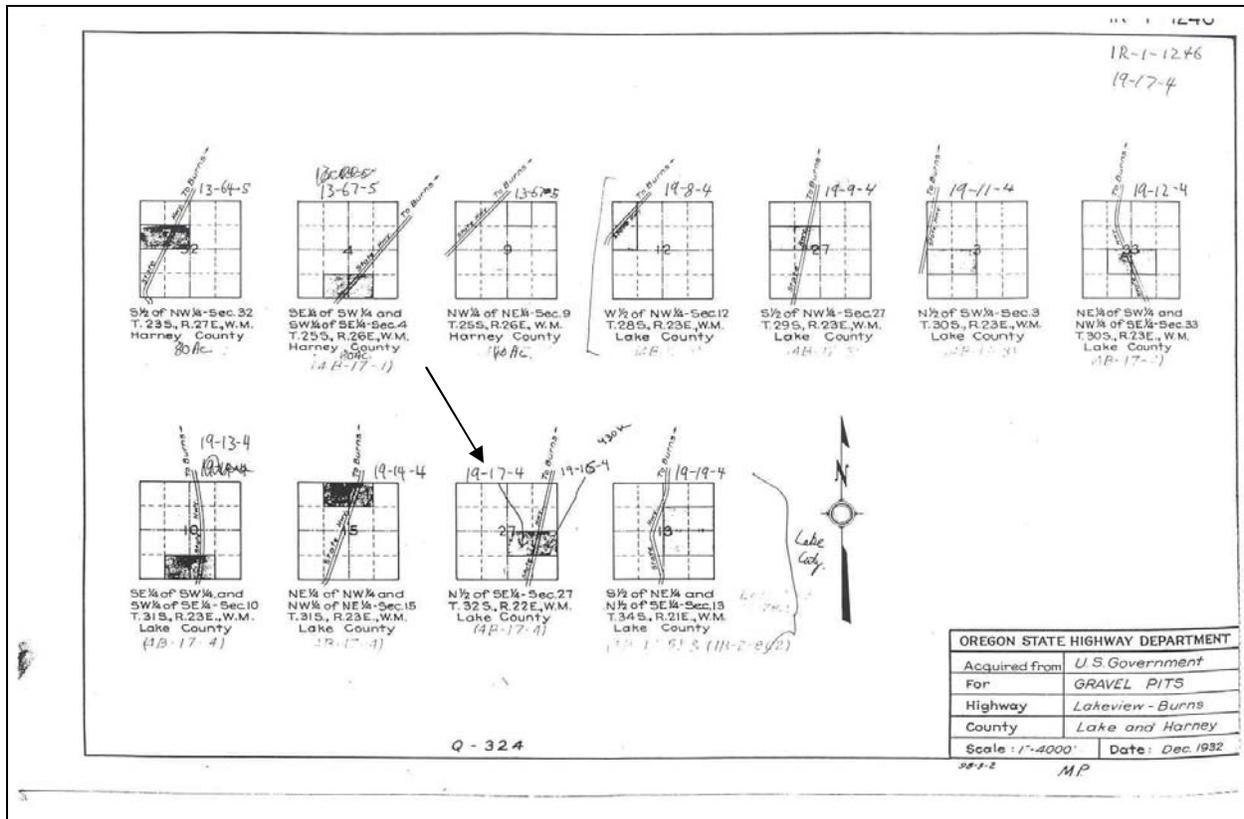
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Lake				11	0049	64	32S	22.0E	27
File ID		Source #	Date Visited	Map #			Type of Site		
32415, Q0324		19-017-4	07/19/2000	1R-1-1246			Borrow		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #				
42°45'50.19817"	120°06'22.13335"	1359.689	40	<10 acres	19-0040				
Comments									
GPS acquired in the pit on the west side.									
Rock Type	Unit	Color		Weathering			Jointing		
Volcanic Gravel	Qs	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Fair			NA	120	726,000	1,176,120			
Potentially Significant Site	Why			Open/Closed	Direction				
No	USA Ground			Closed	NA				
Adjacent Land Use									
Open space									
Remarks									
This site is located on either side of Highway 395. The material is composed of a heterogeneous mix of size and shape volcanic gravel. About 60% gravel and 40% sand by volume. There is plenty of room to work with limited screening. The terrain is fairly flat. USA ground.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
2.05	2.34	35.44	15.26	3.27	16.8	1.2	25.7	3.4	
Material Use									
(1975)									



Panoramic view of the borrow site located west of Highway 395, Alkali Lake is in the background.



Close-up view of the ground at this site located north of Alkali Lake.



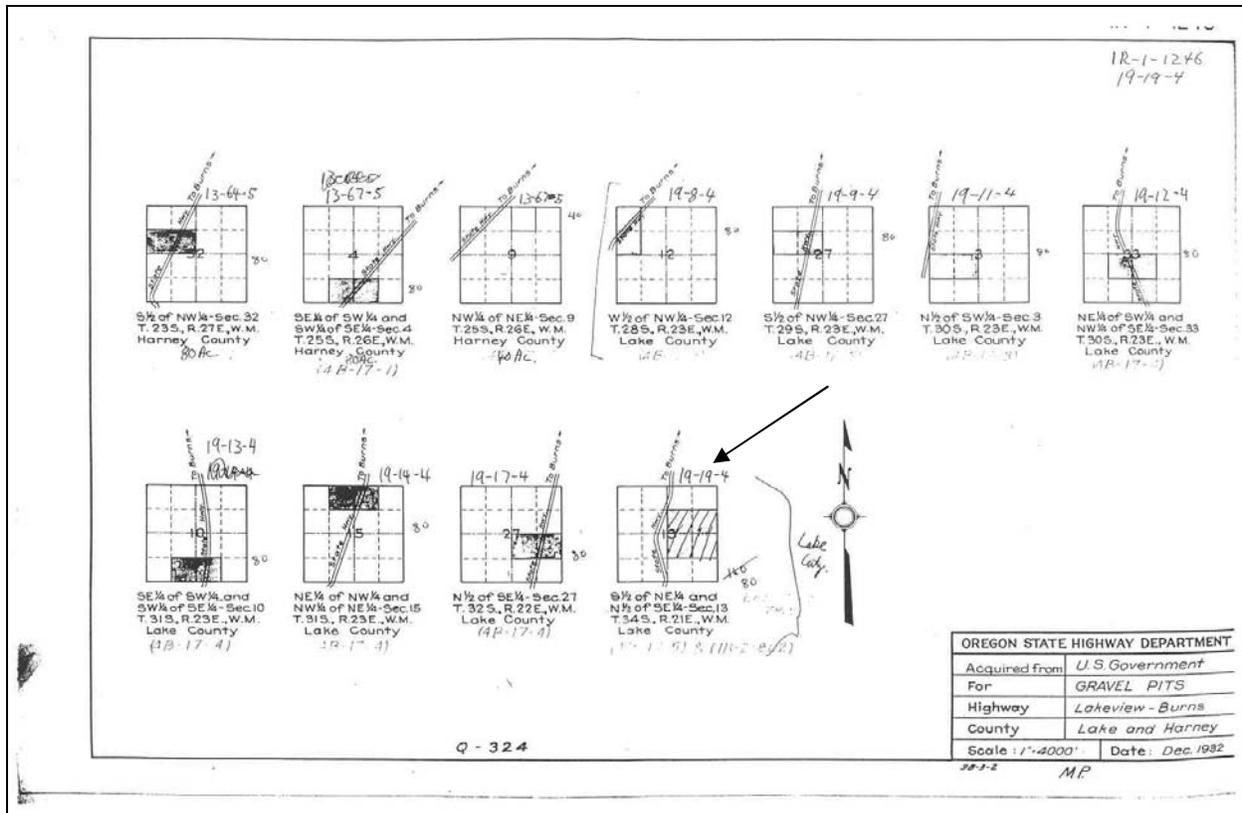
Aerial view of the borrow site located west of Highway 395.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Lake				11	0049	78.47	34S	21.0E	13
File ID		Source #	Date Visited	Map #			Type of Site		
32415, Q0324		19-019-4	07/19/2000	1R-2-802, 1R-1-1246			Raw Land		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
42°37'29.20550"	120°11'03.22165"	1313.335	80	NA					
Comments									
GPS acquired on site.									
Rock Type	Unit	Color		Weathering			Jointing		
Basalt	Tba	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Fair to Good			NA	120					
Potentially Significant Site	Why			Open/Closed	Direction				
No	USA Ground			Closed	Adjacent to Abert Lake				
Adjacent Land Use									
Open space									
Remarks									
This site is located adjacent to and east of Highway 395. There are no visible disturbances along this stretch of the highway next to Lake Abert. The site is at the bottom of Abert Rim in a colluvial fan. There are no stock piles here now. The ground has gradual terrain to towering cliffs with no screening from the highway and ample room to work. This ground has the potential for a lot of raw material. USA ground.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

E



View to the east of the raw land site located on the eastside of Highway 395 and the base of Abert Rim.



Aerial view of the raw land site that is adjacent to the highway and Abert Lake.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Lake				11	0049	85.89	35S	21.0E	15
File ID		Source #	Date Visited	Map #			Type of Site		
Q0502		19-020-4	07/19/2000	1R-1-1662			Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
42°31'51.67069"	120°13'50.26061"	1327.465	48	<40 acres		19-0038			
Comments									
GPS acquired on the third bench.									
Rock Type	Unit	Color		Weathering			Jointing		
Basalt	Tba	Medium Light Grey (N6)		Slight to Fresh			Highly Fractured		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Fair to Good			R3	153	160,000	330,480			
Potentially Significant Site	Why			Open/Closed	Direction				
No	USA Ground			Closed	Lake Abert is adjacent to the west				
Adjacent Land Use									
Open space									
Remarks									
This site is located east of Highway 395. The rock is a very coarse-grained to fine-grain vesicular basalt. Part of the site is a slump block of Abert Rim and part of the site is composed of a colluvial fan. You can rip the material. There is ample room to work and no screening from the highway. The terrain at the upper benches is very steep (~40 degrees). You can get rip rap from this site. The BLM has blocked the northern portion of the quarry off for a wilderness study. USA ground.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
2.59	2.61	20.7	5.5	0.3			16.4	0.6	
Material Use									
(1982)									

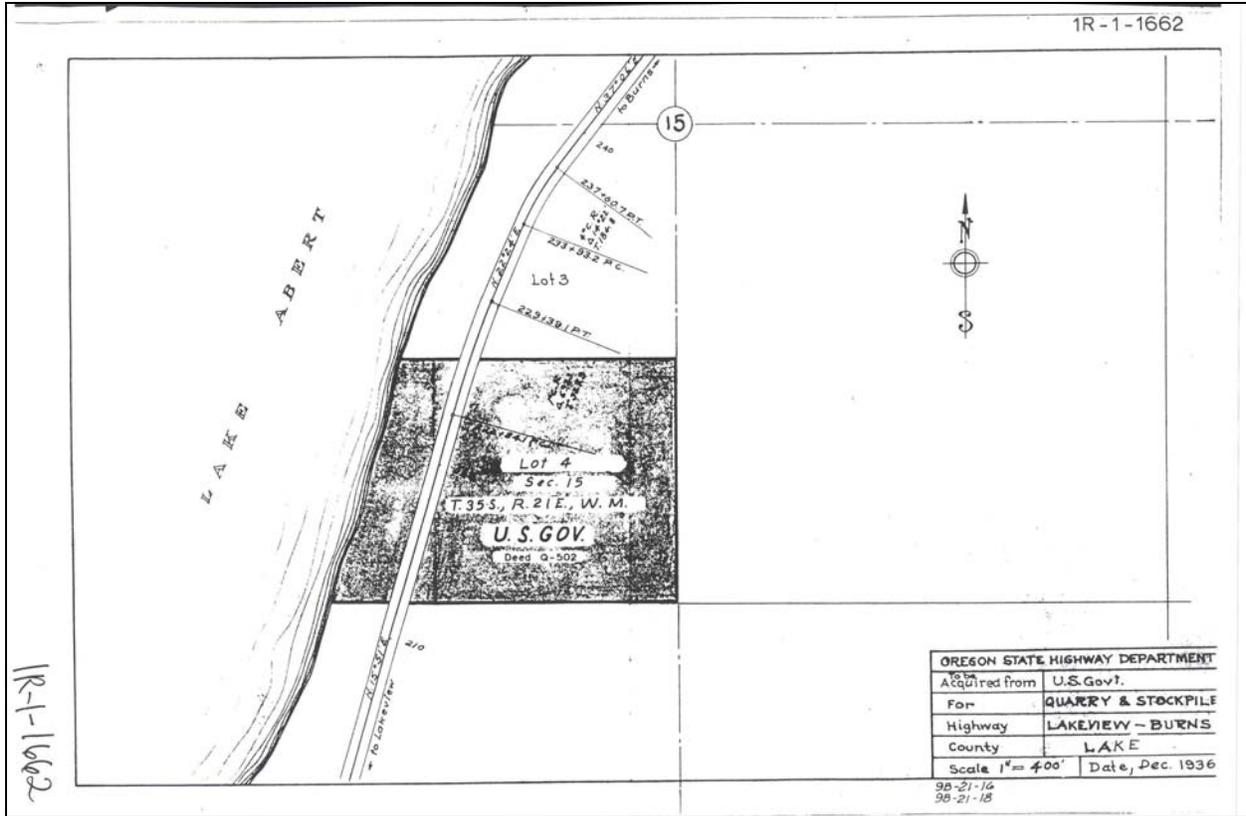
N

NE



Looking to the northeast at the quarry site at the base of Abert Rim.

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



Aerial view of the quarry site in relation to the highway and Abert Lake.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Lake					11	0019	126.42	36S	21.0E	31
File ID		Source #	Date Visited	Map #		Type of Site				
06092		19-042-4	07/18/2000	1R-2-598		Raw Land				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42°24'22.50858"	120°17'23.66111"	1371.625	40	NA						
Comments										
GPS acquired along Highway 395.										
Rock Type	Unit	Color		Weathering		Jointing				
Lapilli Tuff	Tsf	Pale Reddish Brown (10R 3/4)		Slight		Unknown				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair to Poor			R2+	130						
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	Crooked Creek bisects the ground					
Adjacent Land Use										
Open space										
Remarks										
This is a raw land site on either side of Highway 395 just south of Chandler State Park. Part of the 40 acre site is the State Park. The main lithology here is a lapilli tuff of poor quality. There could be some basalt flows interfingering on the ground maybe? There is no screening with no room to work. Some of the terrain is fairly steep (20 degrees).										
Final Comments										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

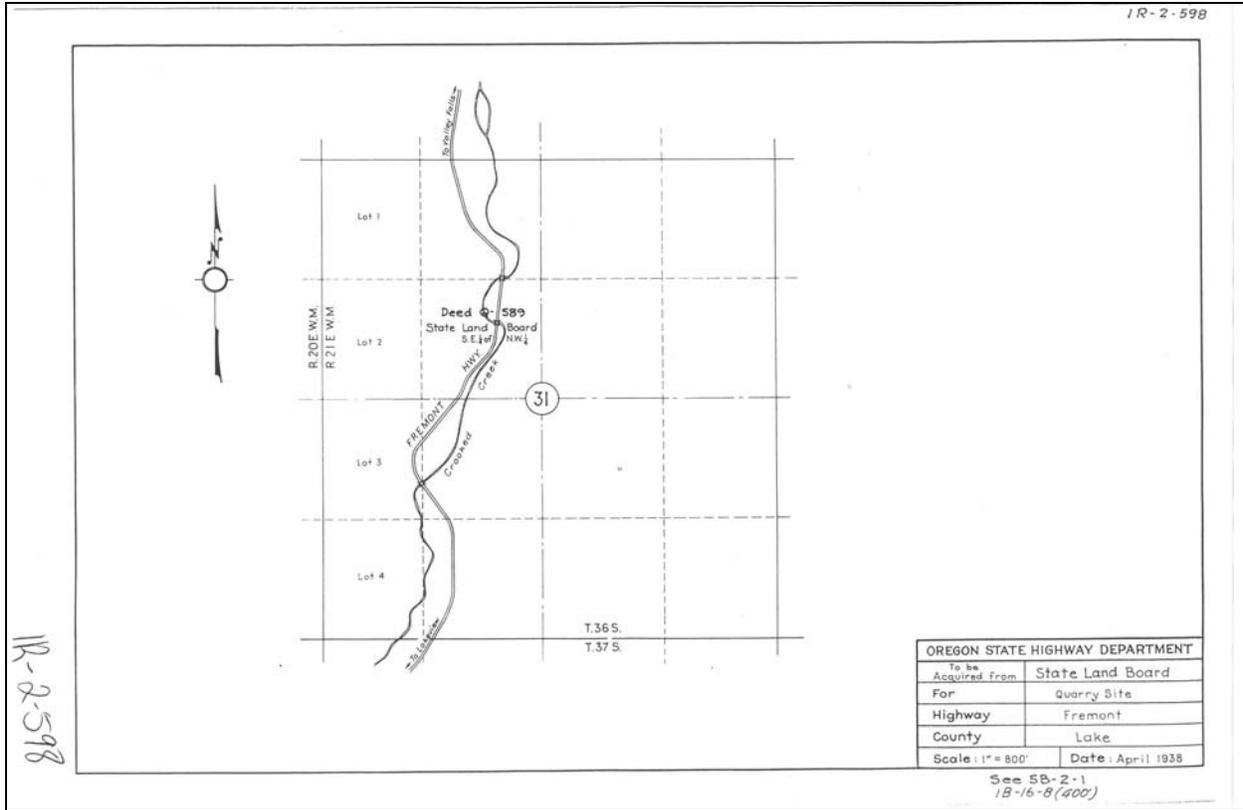
S

W



View to the southwest of the raw land that Highway 395 bisects. The entrance to Chandler State Park is shown on the right side of the image.

Close-up view of the material along the road cut with the hammer for scale.



Aerial view of the raw land site located adjacent to Highway 395.

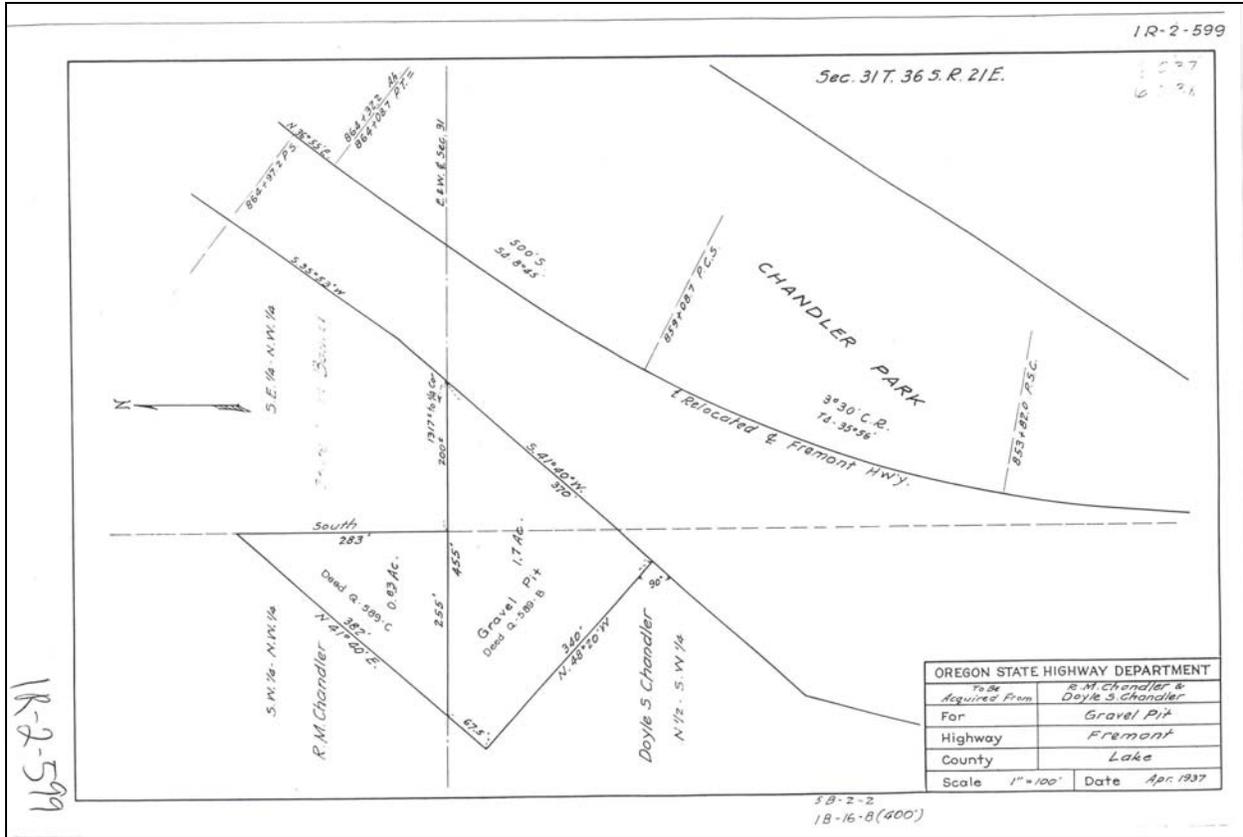
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Lake					11	0019	126.42	36S	21.0E	31
File ID		Source #	Date Visited	Map #		Type of Site				
06037, 06038		19-043-4	07/18/2000	1R-2-599		Raw Land				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42°24'22.50858"	120°17'23.66111"	1371.625	2.53	NA						
Comments										
GPS from site 19-042-4.										
Rock Type	Unit	Color		Weathering		Jointing				
Volcanic	Qal	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	NA			Closed	Adjacent to Crooked Creek					
Adjacent Land Use										
Open space										
Remarks										
This site is adjacent to site 19-042-4. This is a very small site that has both alluvium and colluvium rock from the surrounding hills. There is no screening and no room to work. Possible site for wetland mitigation (Crooked Creek). GPS coordinates are from the adjacent site 19-042-4.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

SW



Small raw land site adjacent to Highway 395.

19-043-4



Aerial view of the small site west of Highway 395.

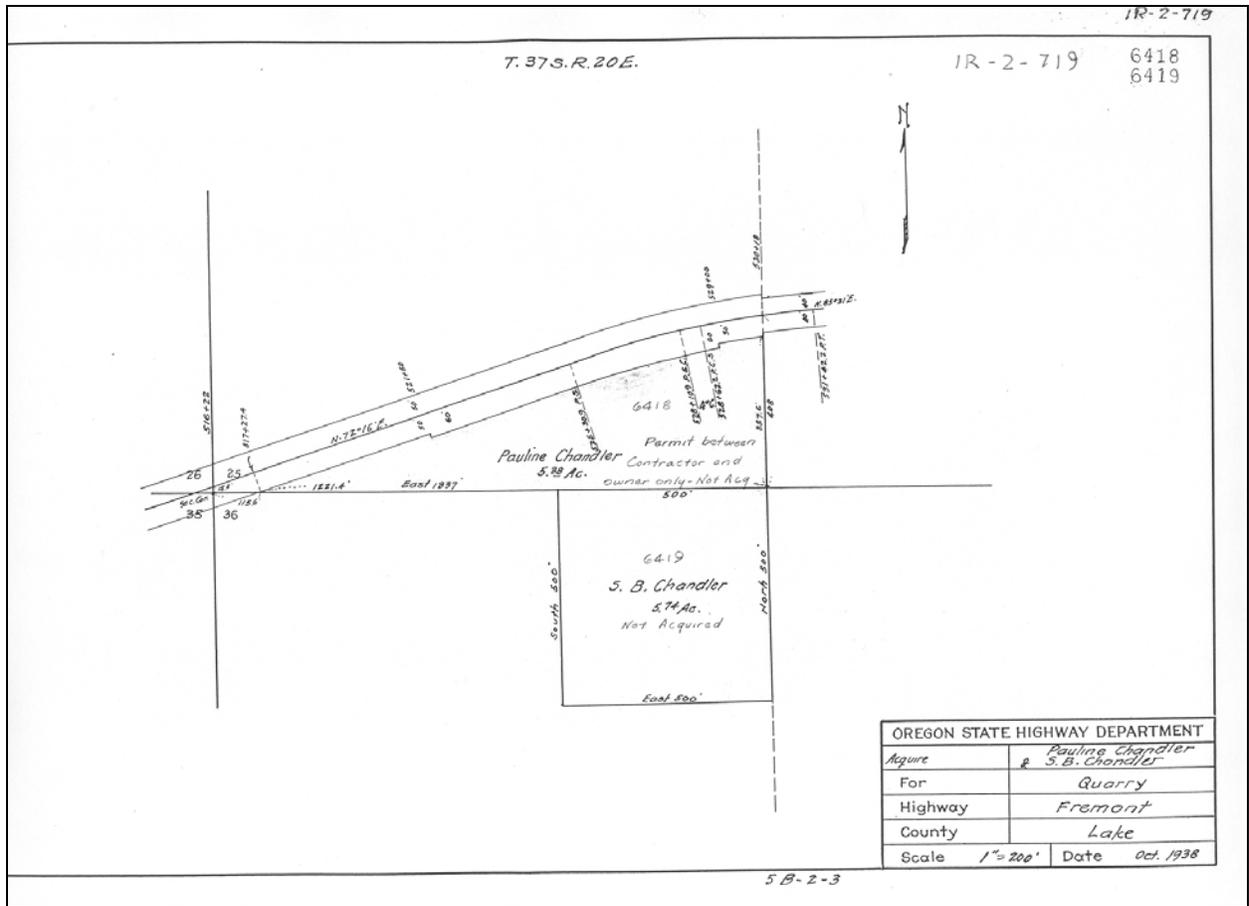
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Lake					11	0019	132.6	37S	20.0E	25
File ID		Source #	Date Visited	Map #		Type of Site				
NA		19-045-4	05/09/2001	1R-2-719		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42°19'30.52000"	120°18'47.71000"	1482	11.12	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering		Jointing				
Basalt	Tsf	NA		NA		NA				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Poor			NA	155	120,000	251,100				
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	NA					
Adjacent Land Use										
Ranching										
Remarks										
This site is a private quarry adjacent to and south of Highway 395. I evaluated the basalt along the road cut and found it to be decomposing with some hard good rock interfingering. There appears to be room to work with limited screening. You could rip the material. Gradual terrain.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

S



View to the south of the road cut that is a part of the quarry site along Highway 395 with the suburban for scale.

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



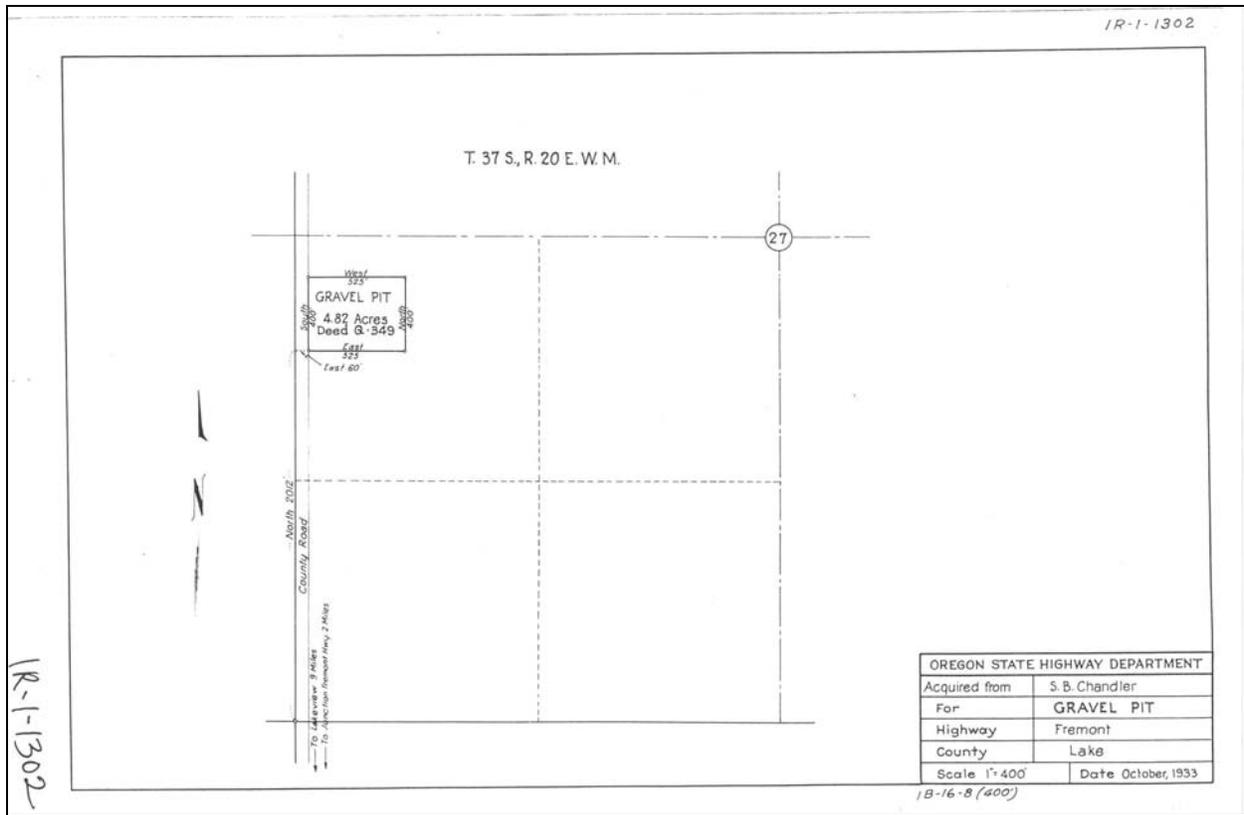
Aerial view of the quarry site along Highway 395.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Lake				11	0019	134.63	37S	20.0E	27
File ID		Source #	Date Visited	Map #			Type of Site		
01113		19-046-4	01/18/2000	1R-1-1302			Borrow		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
42°19'49.24844"	120°21'22.56019"	1518.014	4.82	NA					
Comments									
GPS acquired along the County Road and the site.									
Rock Type	Unit	Color	Weathering			Jointing			
Volcanic Gravel	Qs	NA	NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Fair			NA	120	130,000	210,600			
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 one mile. There is some past disturbance at the site. The material is composed of a rounded mix of volcanic gravel. The lithology ranges from basalt to rhyolite. The largest size is cobble (3%), pebble (60%), and sand (35%). There is good screening from the highway but no room to work. Ther is no access into site.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									



Looking northeast at the borrow site along the County Road.

Close-up view of the volcanic material at this location.



Aerial view of the material site and the surrounding area.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Lake	Chandler Gravel Pit				11	0019	134.06	37S	20.0E	35
File ID		Source #	Date Visited	Map #		Type of Site				
03461		19-047-4	07/18/2000	1R-1-1576		Raw Land				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42°18'46.56000"	120°19'54.40000"	1535	7.37	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
Igneous	Tsf	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Unknown			NA	120	100,000	162,000				
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	NA					
Adjacent Land Use										
Open space/ranch home 500 meters to the southwest										
Remarks										
This is raw land located east of Highway 395. There is no access to this site and no visible disturbances. There could be some overburden. Limited screening and limited room to work. The terrain is gradual. The access road on the 1R map is located on a blind radius now. This site should be evaluated for surplus.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

NE



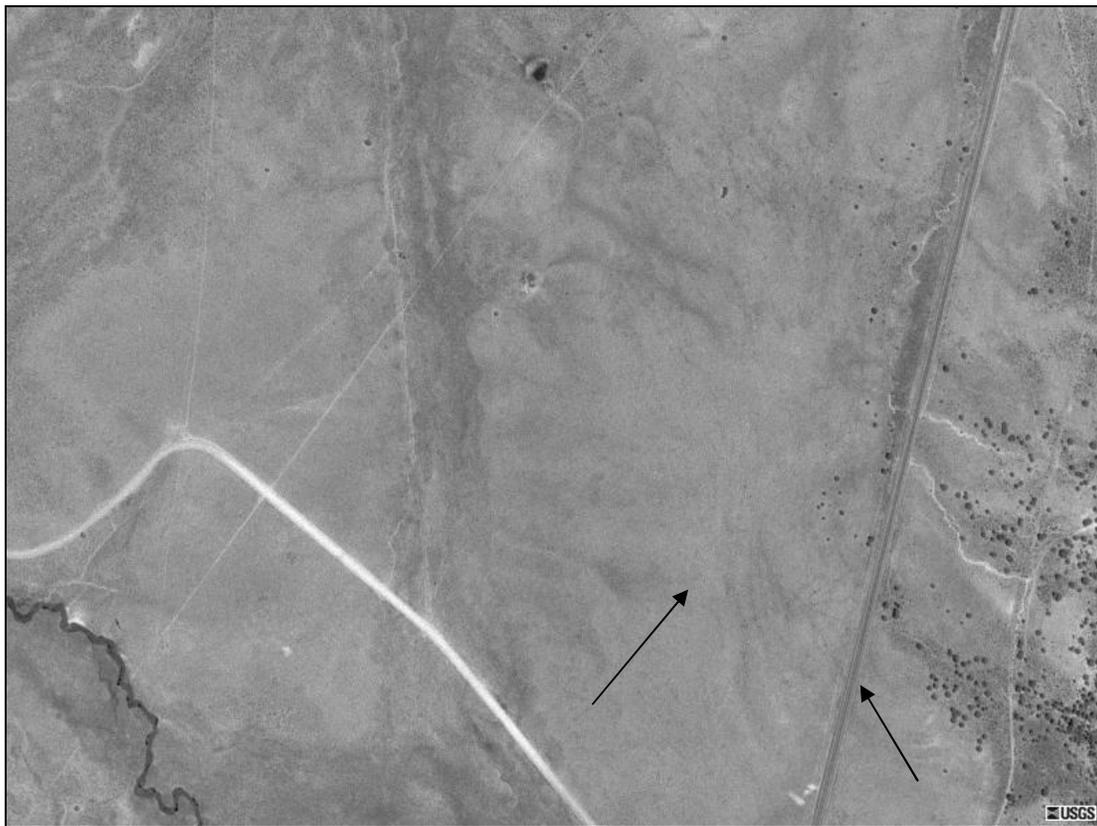
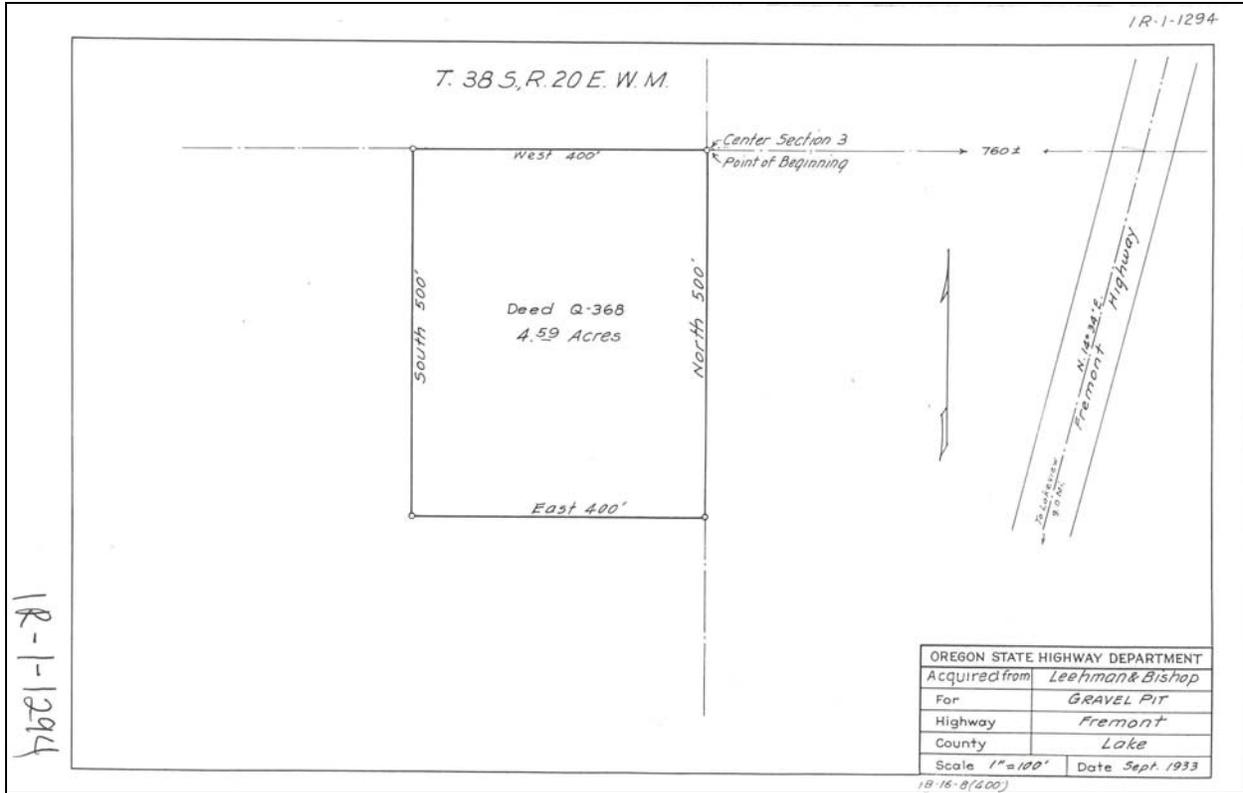
Looking up at the hilltop towards the raw land site behind the dwelling.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Lake				11	0019	135.04	38S	20.0E	03
File ID		Source #	Date Visited	Map #			Type of Site		
01111		19-048-4	01/18/2000	1R-1-1294			Raw Land		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
42°18'04.33000"	120°20'48.90000"	1523	4.59	NA					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
NA	Qs	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
NA			NA	120	130,000	210,600			
Potentially Significant Site	Why			Open/Closed	Direction				
NA	NA			NA	NA				
Adjacent Land Use									
Open space/Ranching									
Remarks									
This is raw land with no visible disturbances and no access to the site. There would be no screening from the highway and limited room to work. This site should be evaluated for surplus.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

NE

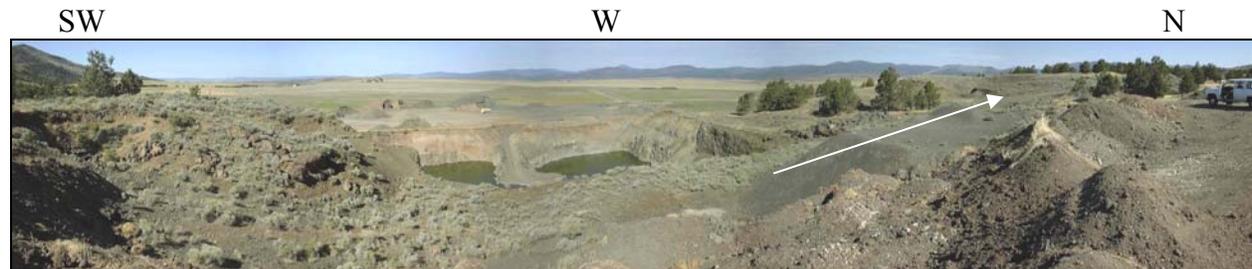


View of the raw land site located west of Highway 395.



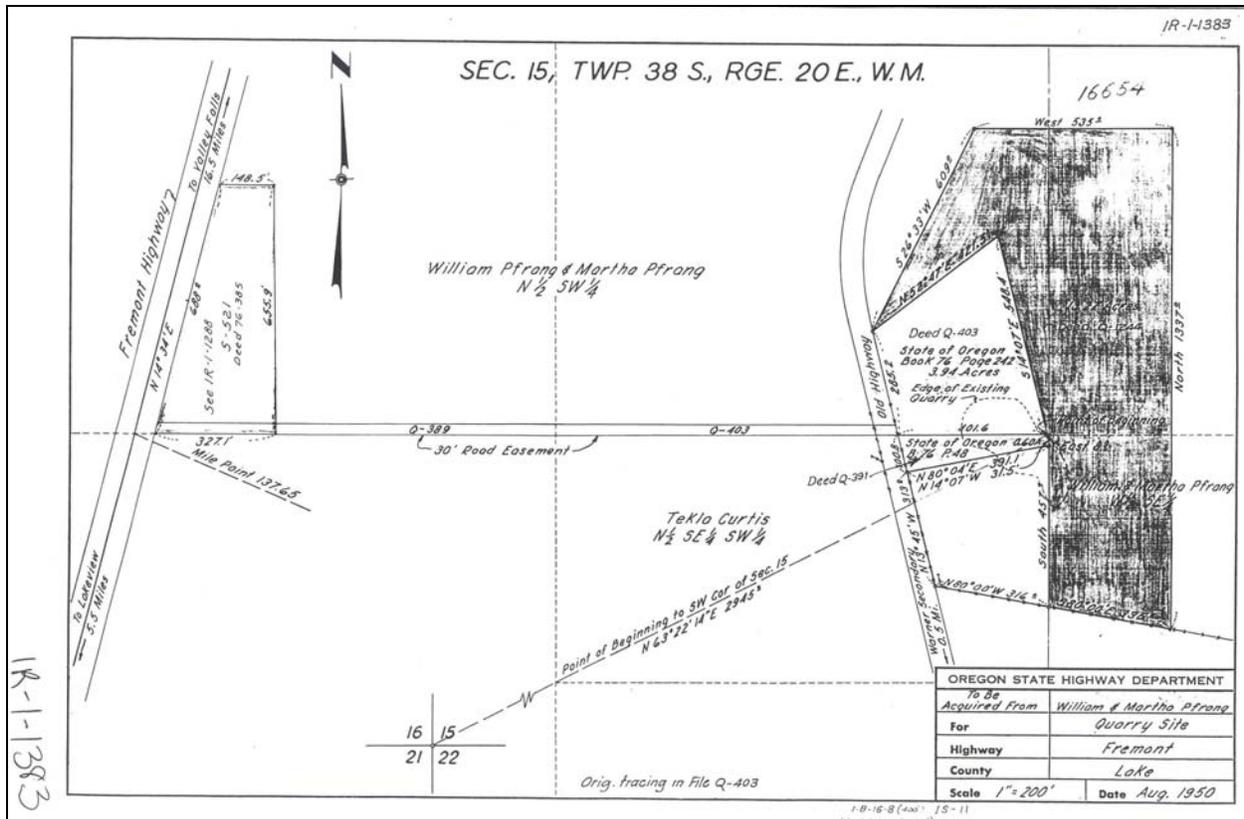
Aerial view of the area in relation to Highway 395 (right arrow).

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Lake	Chambers Quarry				11	0019	137.86	38S	20.0E	15
File ID		Source #	Date Visited	Map #		Type of Site				
01739, 16654, 01738		19-049-4	01/18/2000	1R-1-1383		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42°16'12.71841"	120°21'18.82036"	1506.291	18.45	<9 acres	19-0083					
Comments										
GPS acquired at the access point and Highway 395.										
Rock Type	Unit	Color		Weathering		Jointing				
Basalt	Tsf	Olive Grey (5Y 4/1)		Decomposing		Highly Fractured				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Poor to Fair			R2	155						
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	South about 500 meters is Warner Creek					
Adjacent Land Use										
Ranch/Rural Residential, one residence adjacent east.										
Remarks										
This site is east of Highway 395 about 800 meters. The basalt exposed at the surface is decomposing. The overburden could be up to 15 feet thick. There are pods of good quality basalt scattered throughout the ground. The basalt at depth looks good to fair based on the exposed rock in the adjacent private quarry. This site is used now for a waste site. There is limited screening but plenty of room to work. We should survey the boundaries to determine our ground from the rest of the area. Calcite veinlettes throughout the rock. This site will need an assessment to open it back up.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.38	2.65	15.8	40.8	42.9	14.9	3.0	20.2	2.5		
Material Use										
Sanding and Chip Seal Aggregate (1988)										



View of the stock pile site and the quarry site (right arrow), the private quarry is located in the center of the image.

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



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

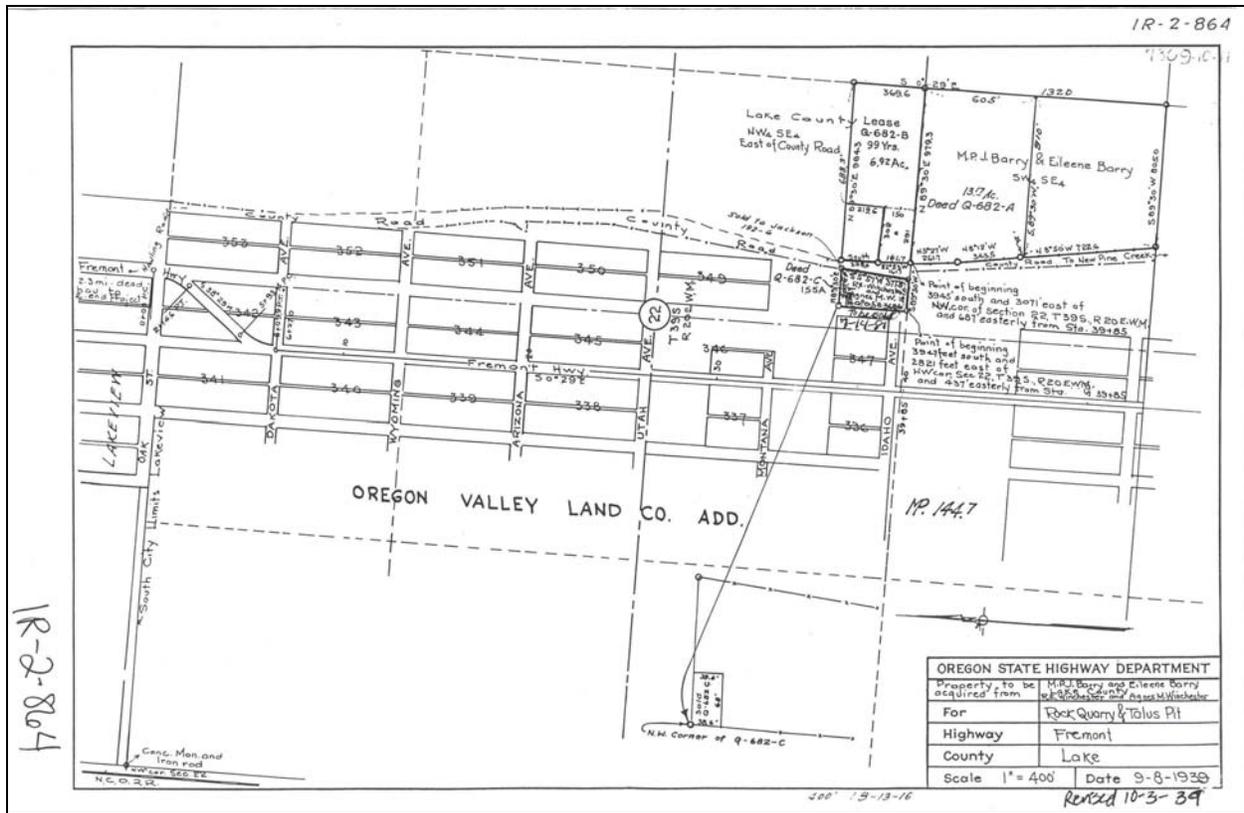
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Lake				11	0019	145.3	39S	20.0E	22
File ID		Source #	Date Visited	Map #			Type of Site		
07309, 07310, 07311		19-055-4	06/28/2000	1R-2-864			Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
42°10'09.81160"	120°20'41.01562"	1458.206	20.09	<3 acres					
Comments									
GPS acquired at locked gate.									
Rock Type	Unit	Color		Weathering			Jointing		
Rhyolite	Tsf	Pale Pink (SRP 8/2)		Moderate			Highly Fractured		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Poor to Fair			R2	143	300,000	579,150			
Potentially Significant Site	Why			Open/Closed	Direction				
No	Leased ground from Lake County			Closed	NA				
Adjacent Land Use									
Residential/Commercial									
Remarks									
This site is leased from the County (99yr). The rock is a highly fractured soft rhyolite. The value would be for fill material only. There is room to work with no screening. You can rip the material. The pit face is very tall (90+ feet) and vertical.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
	2.58	18.1							
Material Use									
AC Strip (1949)									

NE

SE



View to the east of the quarry site.
Note the suburban for scale.



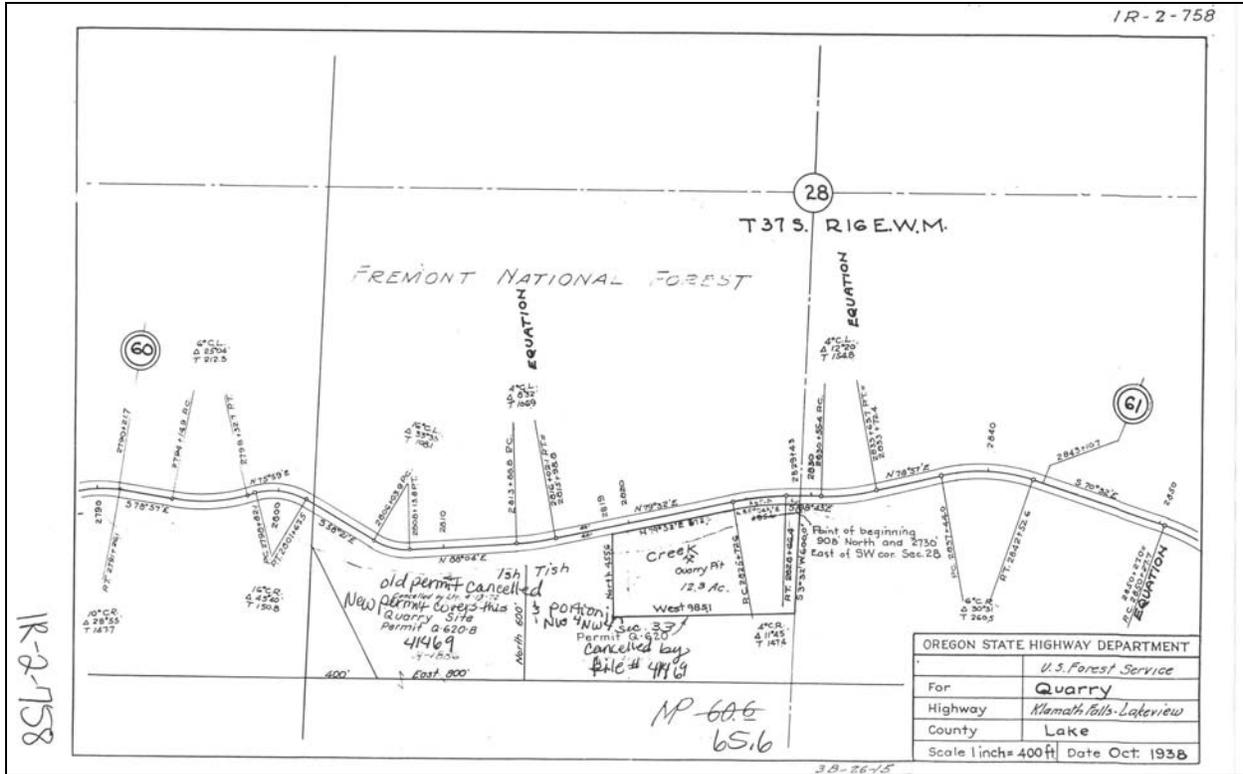
Aerial view of the quarry in relation to the town of Lakeview.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Lake	Ish Tish Creek Quarry				11	0020	65.9	37S	16.0E	28
File ID		Source #	Date Visited	Map #		Type of Site				
Q0620B		19-060-4	06/27/2000	1R-2-758		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42°19'35.75000"	120°50'23.11000"	1646	14.2	<1 acre	19-0007					
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color	Weathering		Jointing					
Basalt	Tb	NA	NA		NA					
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair to Good			NA	155						
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 anymore due to the re-alignment of Highway 140. There are two quarries adjacent to one another. The eastern most has a small pit while the western site appears to have been reclaimed. There is room to work but no screening from the highway. USA ground.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
	2.68	14.1					13.6	0.8		
Material Use										
BASE (1988)										

SW



Looking from Highway 140 towards the quarry site.

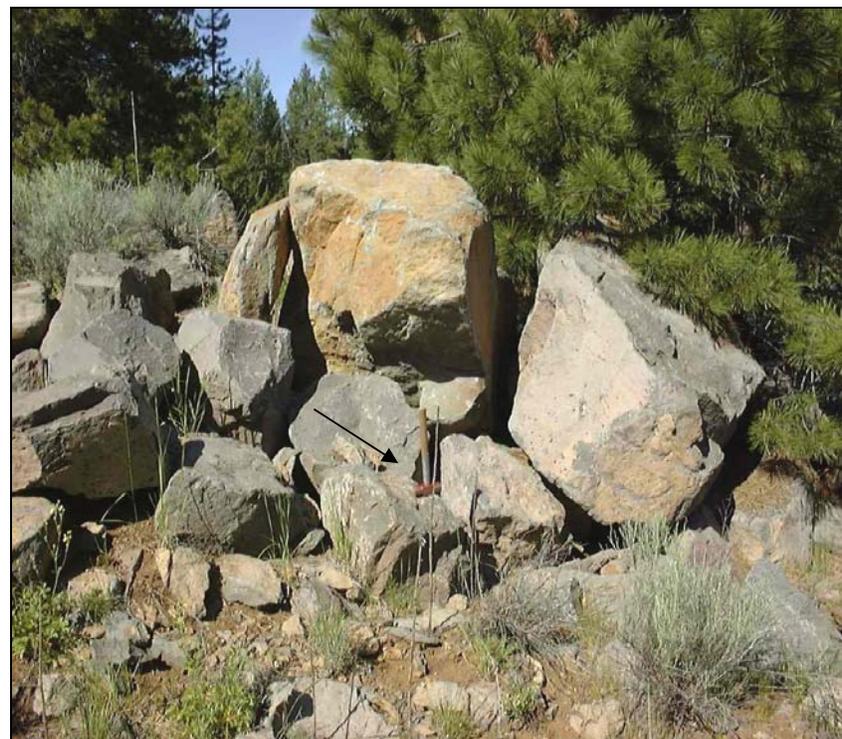


Aerial view of the quarry site in relation to Highway 140.

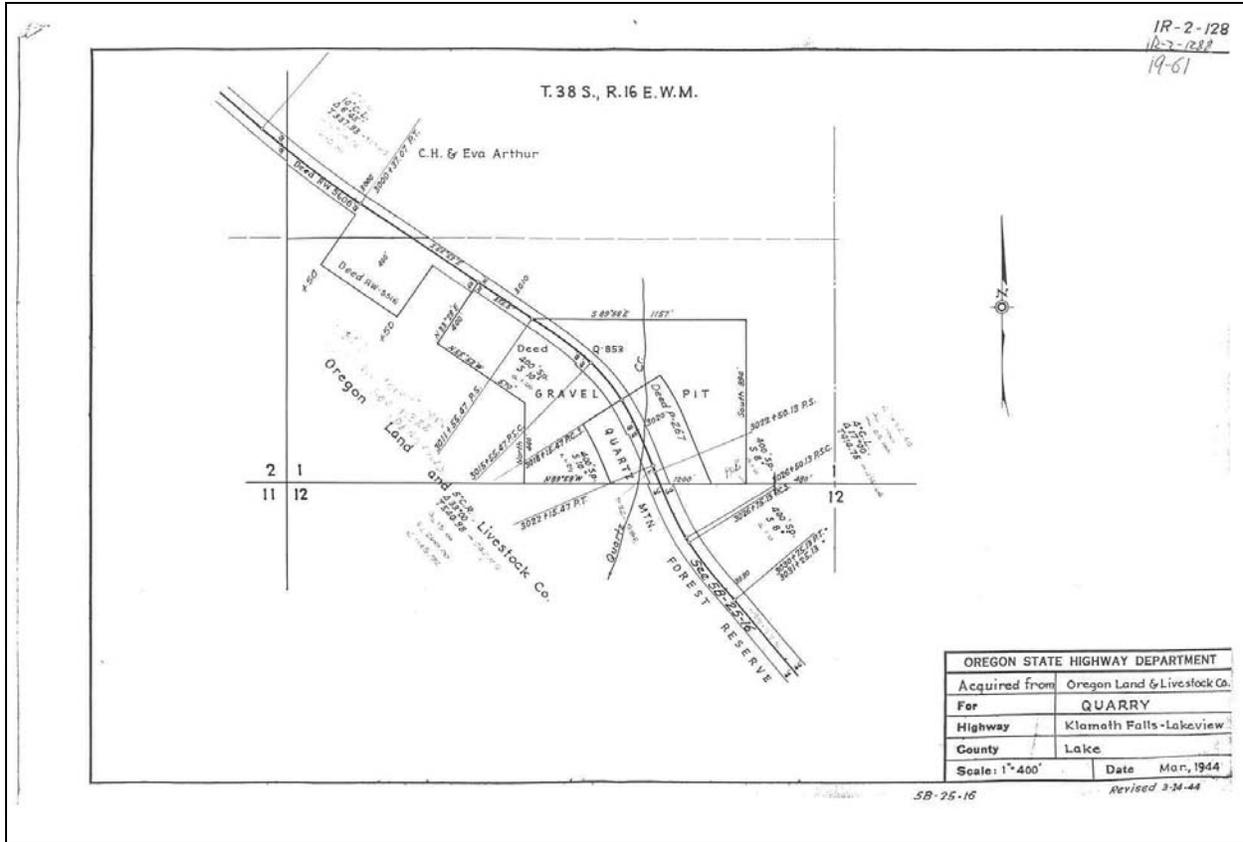
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Lake	Quartz Mountain Quarry				11	0020	69.9	38S	16.0E	01
File ID		Source #	Date Visited	Map #		Type of Site				
07889A		19-061-4	06/27/2000	1R-2-1288		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42°17'53.63248"	120°46'44.48421"	1631.421	28.58	NA						
Comments										
GPS acquired in the reclaimed pit.										
Rock Type	Unit	Color		Weathering		Jointing				
Andesite	Tb	NA		NA		NA				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair to Good			NA	155						
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	Quartz Creek is to the north about 300 meters					
Adjacent Land Use										
Open space										
Remarks										
This site is situated on both sides of Highway 140. The northeast side has had little disturbance and is a location for large blocks of waste rock from the area. The southern portion has been reclaimed recently and is depleted. There is limited room to work and some screening. Some of the large blocks of waste rock could be used for rip rap.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.78	2.8	15.2	2.0	2.7			18.1	0.7		
Material Use										
BASE AC (1988)										



Panoramic view of the reclaimed quarry site along Highway 140.



Close-up view of some riprap at the quarry site located across the highway from the reclaimed pit.



Aerial view of the reclaimed pit and the surrounding area along Highway 140.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Lake				11	0020	71.41	38S	17.0E	18
File ID		Source #	Date Visited	Map #			Type of Site		
07889		19-062-4	06/27/2000	1R-2-952			Gravel		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
42°16'35.91000"	120°45'34.97000"	1559	4.18	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	Quartz Creek bisects property				
Adjacent Land Use									
Open space									
Remarks									
This site is located south of Highway 140. There is no access to this property due to the re-alignment of the highway. The property is long and narrow on both sides of Quartz Creek. Possible site to mitigate. This site should be evaluated for surplus.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									



View of the gravel site along Quartz Creek and Highway 140.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Lake	Drews Reservoir/Smith Quarry			11	0020	77.49	39S	17.0E	02
File ID		Source #	Date Visited	Map #		Type of Site			
05532, 05347, 09806		19-063-4	06/27/2000	1R-2-533		Quarry			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #				
42°13'04.92375"	120°41'03.19926"	1546.103	35.37	<1 acre	19-0056				
Comments									
GPS acquired at the locked gate.									
Rock Type	Unit	Color		Weathering		Jointing			
Basalt	Tb	Medium Grey (N5)		Slight		NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Fair to Good			R3	161					
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			Closed	Adjacent to Drews Reservoir				
Adjacent Land Use									
Ranching adjacent 700 meters to the southeast									
Remarks									
This site is located on the south side of Highway 140. Part of the ground has been reclaimed with no visible exposures to evaluate the rock. This site is used as a stock pile site now. There are pyroclastic rocks exposed at this site now and have no value for road construction or maintenance. There is plenty of room to work with good screening. You can rip the rock with little overburden. The terrain is gradual. This site will need an assessment before we can open it up.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
2.52	2.63	14.2	3.6	4.0	17.2	0.8			
Material Use									
EMUL ASPH AGGREGATE (1995)									

SE

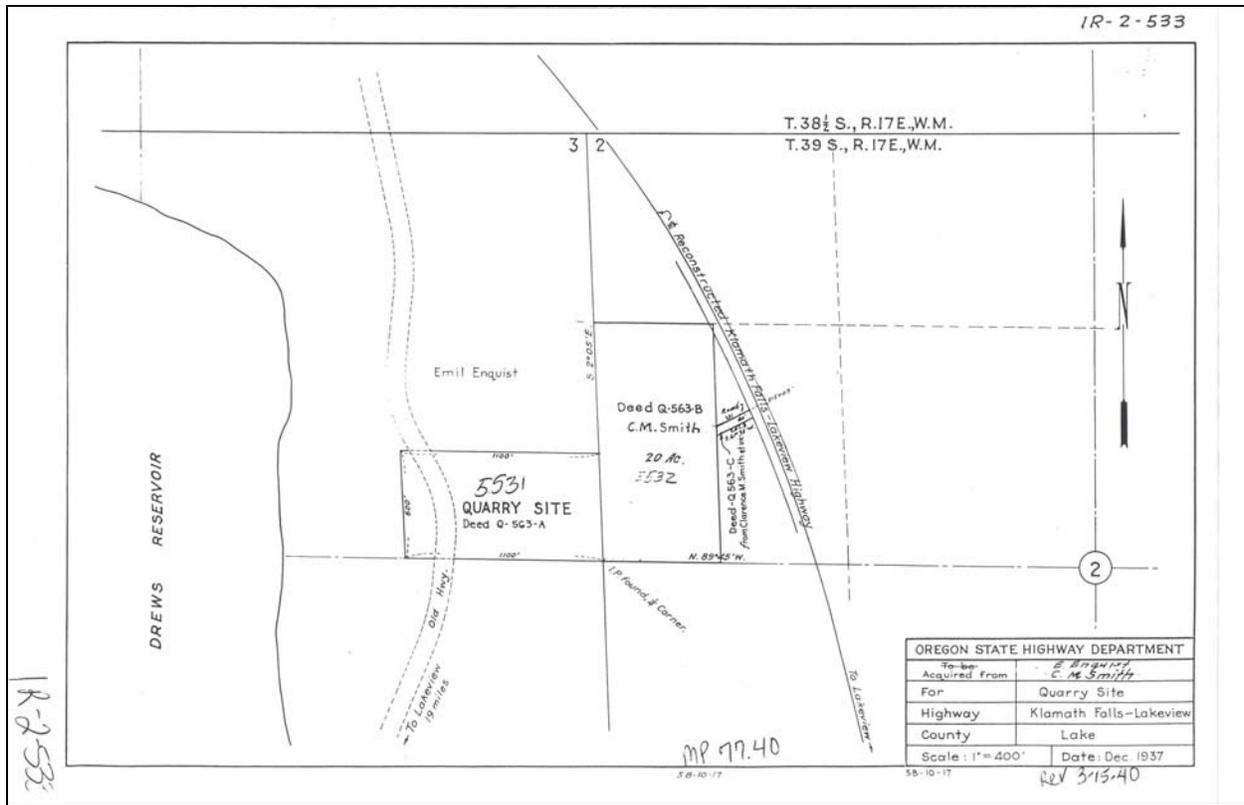
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N



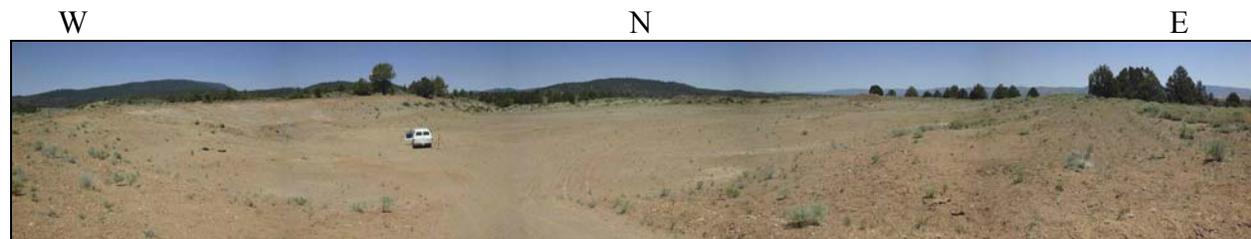
Panoramic view of the quarry site/stockpile site along Highway 140 and Drews Reservoir.

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



Aerial view of the quarry site and the surrounding area.

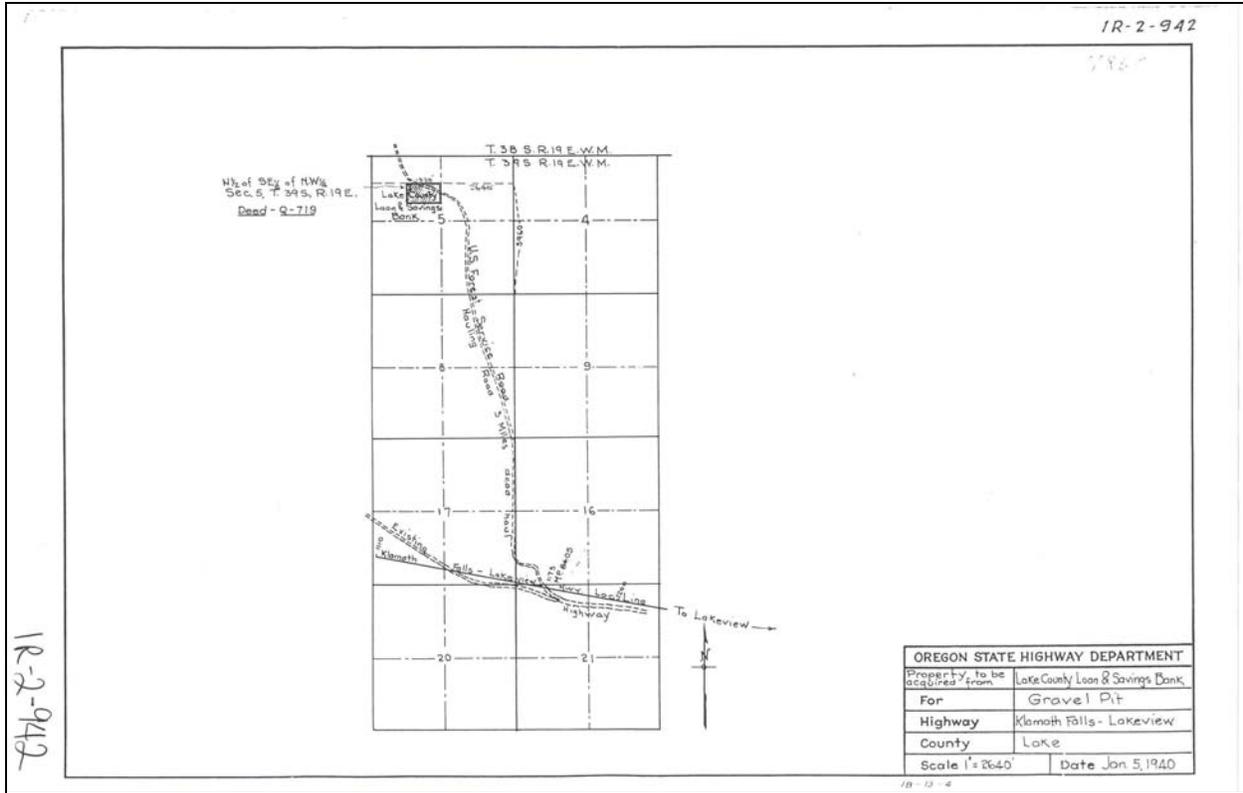
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Lake				11	0020	88.54	39S	19.0E	05
File ID		Source #	Date Visited	Map #			Type of Site		
07860		19-066-4	06/27/2000	1R-2-942			Borrow		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
42°13'04.54476"	120°30'09.43383"	1538.777	20	<2 acres		19-0024			
Comments									
GPS acquired in the pit.									
Rock Type	Unit	Color		Weathering			Jointing		
Volcanic Gravel	Qs	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Good			NA	120	320,000	518,400			
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			Closed	NA				
Adjacent Land Use									
Open space									
Remarks									
This is a gravel site north of Highway 140 about 2 miles. It is a heterogeneous mix of shapes and sizes, ranging from sand (60%) to cobbles. The gravel by volume is approximately 40%. There is plenty of room to work with good screening. Most of the gravel is well rounded and prismatic. Part of our ground or adjacent to our site is a nature preserve or study area.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
		20.52					18.02	2.6	
Material Use									
Base and AC (1972)									



Panoramic view of the borrow site north of Highway 140, with the suburban for scale.



Close-up view of the gravel with the hammer for scale.



Aerial view of the borrow site and the surrounding area.

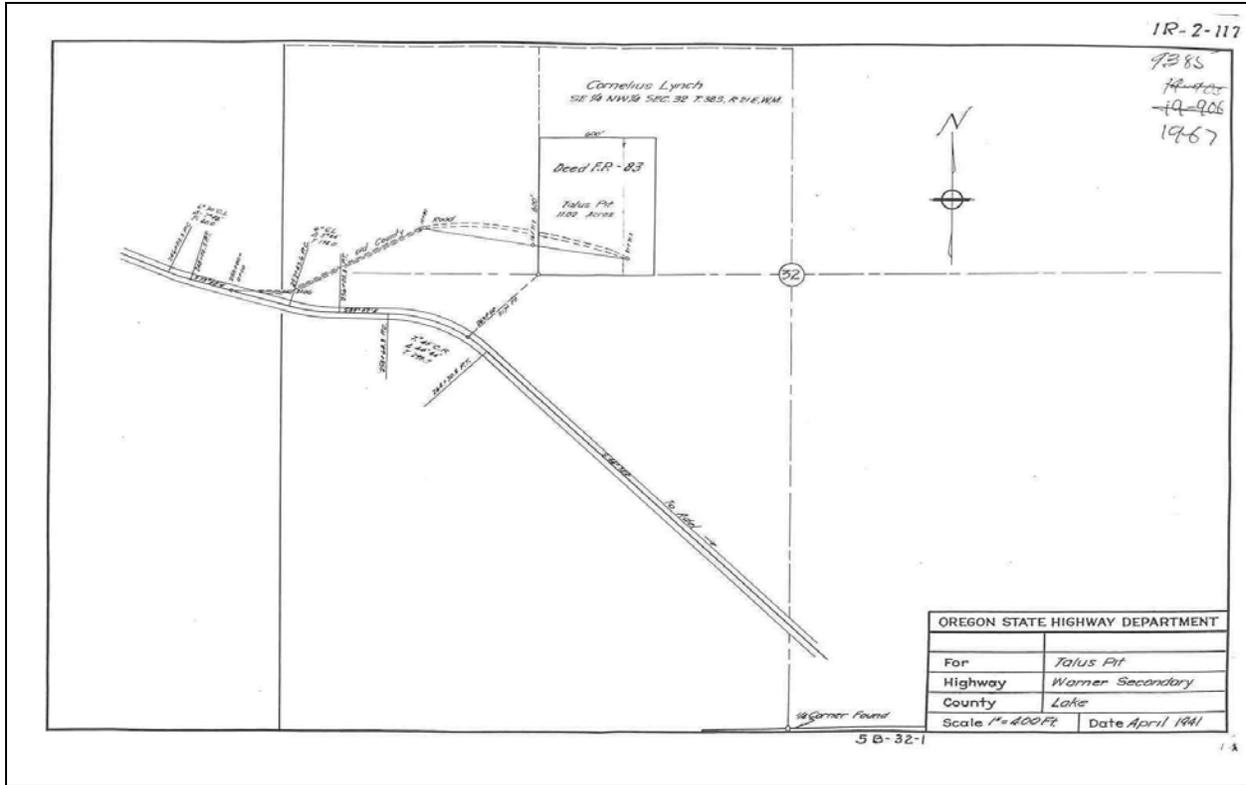
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Lake	Lynch Talus Pit				11	0431	5.6	38S	21.0E	32
File ID		Source #	Date Visited	Map #			Type of Site			
09385		19-067-4	05/09/2001	1R-2-1179			Raw Land			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42°13'46.78000"	120°16'22.19000"	1767	11	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color	Weathering			Jointing				
Tuffs	Tsf	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	Seasonal creek adjacent to the west					
Adjacent Land Use										
Ranching/ Open Space										
Remarks										
This site is adjacent to and north of the new alignment of Highway 140. This is raw land that is composed of poor quality lapilli tuffs and debris flows. The terrain is moderate, around 10 degrees. There would be room to work but 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 access point from the new alignment of Highway 140.

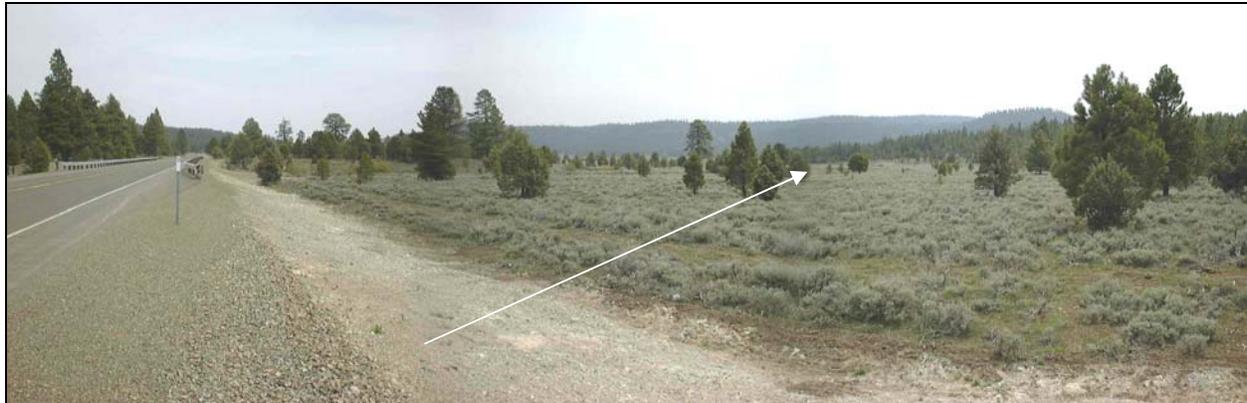


Aerial view of the raw land site before the new highway alignment.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Lake				11	0431	8.12	38S	21.0E	33
File ID		Source #	Date Visited	Map #			Type of Site		
12223, 12224		19-068-4	05/09/2001	1R-2-1542			Raw Land		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
42°13'35.97594"	120°14'46.56860"	1745.412	20.66	NA					
Comments									
GPS acquired at the access road and Highway 140.									
Rock Type	Unit	Color		Weathering			Jointing		
Volcanic	Qal	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		East approximately 200 meters is Butte Creek					
Adjacent Land Use									
Open space									
Remarks									
This site is south of the new alignment of Highway 140 about 250 meters. There are no exposures to evaluate the rocks at the site. The rocks in the general area are tuffs of poor quality. The terrain is flat with room to work but no screening from the highway. Our access is from the old alignment, not the new highway. This ground could be used for a stockpile site or fill material only.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

E

S



View of the borrow site from the new highway alignment.

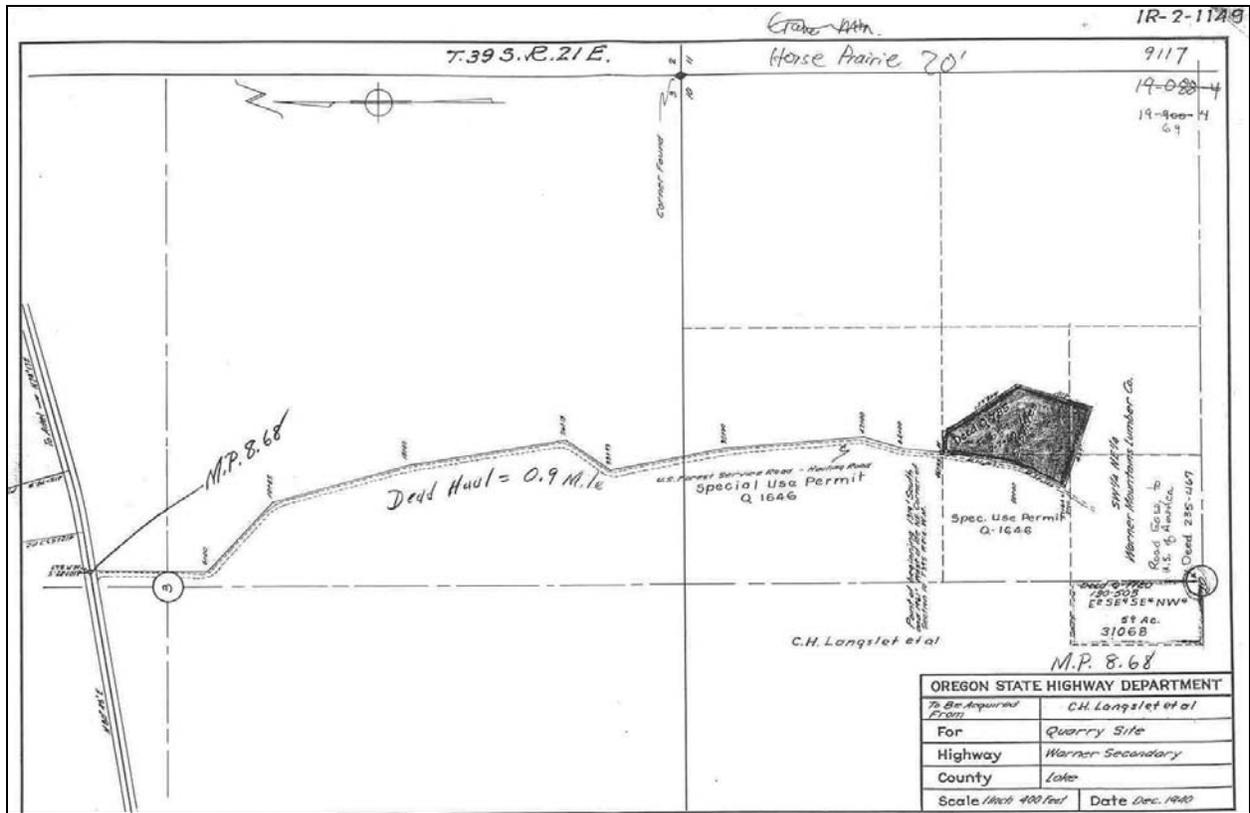
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Lake				11	0431	8.68	39S	21.0E	03, 10
File ID		Source #	Date Visited	Map #		Type of Site			
09117, 21181, 31068		19-069-4	05/09/2001	1R-2-1149		Quarry			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #				
42°12'08.55000"	120°13'31.64000"	1854	20.45	<4 acres	19-0059				
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
Basalt	Tb	Medium Grey (N5)		Slight to Fresh			Highly Fractured		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Good			R3	165	300,000	668,250			
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			Closed	Seasonal creek bisects the ground				
Adjacent Land Use									
Open space									
Remarks									
This site is south about 2 miles of the new Highway 140 alignment. The rocks here are a very platy highly fractured basalt. You can rip the material. The terrain is moderate (8 degrees) with some room to work. The Forest Service Road bisects the ground. There are two pits with the larger site filled in with material from the new highway construction near by on Highway 140. Region 4 wants to dispose of the ground.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
2.45	2.54	17.6	4.5	2.4	14.9	0.6			
Material Use									
AC (1996)									



Panoramic view of the two quarry sites located on each side of the image



Close-up view of the fracture pattern within the basalt and the hammer for scale.



Aerial view of the two quarry sites located south of Highway 140.

County	Site Name		Dist	Hwy	Mile Pt	TWP	RGE	Sect
Lake	Parsnip Creek Quarry		11	0431	18.5	39S	23.0E	06
File ID		Source #	Date Visited		Map #		Type of Site	
15445		19-070-4	06/28/2000		1R-2-1930		Quarry	
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #		
42°12'39.78558"	120°04'06.25217"	1697.797	30	<1 acre				
Comments								
GPS acquired in the pit.								
Rock Type	Unit	Color		Weathering		Jointing		
Basalt	Tb	Medium Grey (N5)		Slight		Highly Fractured		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)		
Fair			R3	168	400,000	907,200		
Potentially Significant Site	Why			Open/Closed	Direction			
No	USA Ground			Closed	Parsnip Creek to the north about 150 meters			
Adjacent Land Use								
Open space								
Remarks								
This site is located south of and adjacent to Highway 140. The rock is a highly fractured platy vesicular basalt. There is room to work with some screening. There can be some overburden up to 5 feet deep in some places. You will need to drill and blast, but can rip some. The rock produces small pieces and fines if you rip the rock. Part of the ground is used for stockpiling. USA ground.								
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.
2.22	2.27	33.5	8.3	8.70			18.2	2.2
Material Use								
(1976)								

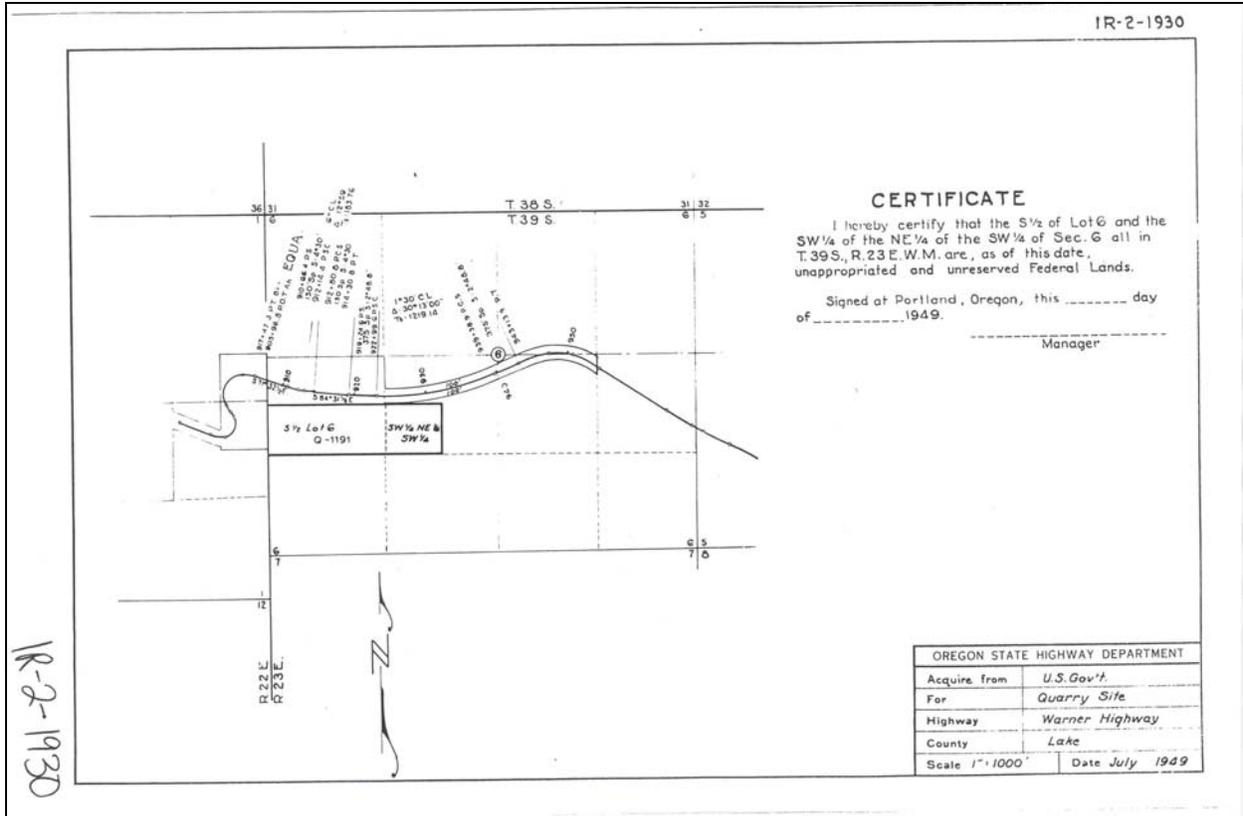
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N



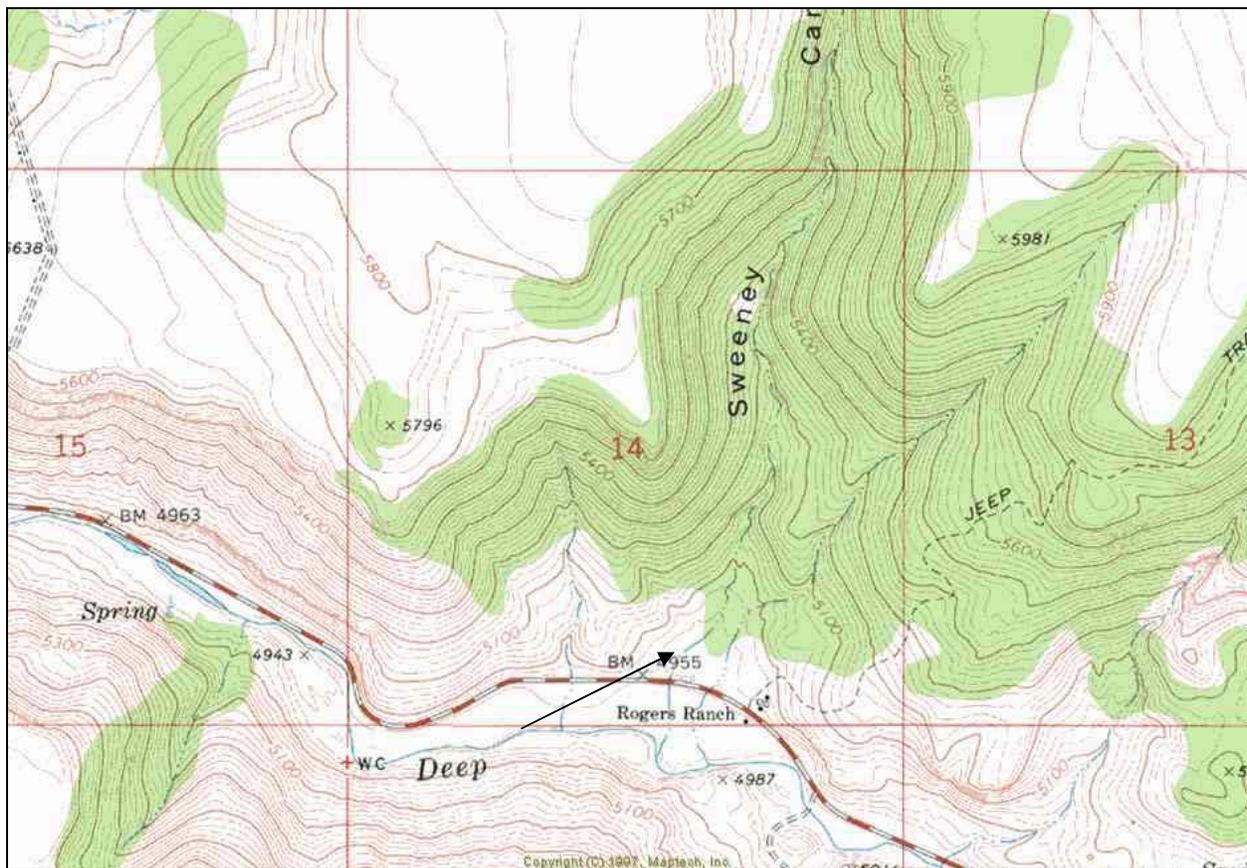
Looking to the north at the quarry site along Highway 140.

Close-up view of the basalt in this area with the hammer for scale.



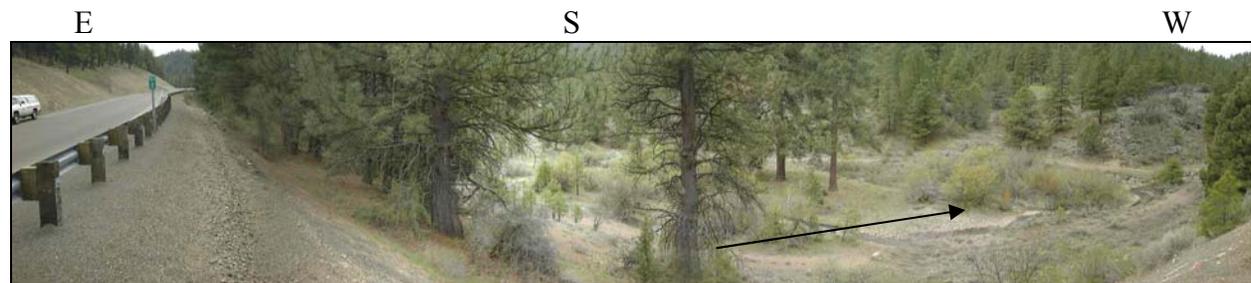
Aerial view of the quarry site along Highway 140.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Lake				11	0431	24.3	39S	23.0E	14
File ID		Source #	Date Visited	Map #			Type of Site		
16146		19-071-4	06/28/2000	1R-2-2527			Gravel		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
42°10'52.62000"	119°58'18.40000"	1476	5.1	NA					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color	Weathering			Jointing			
Volcanic 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	Dry draw bisects ground				
Adjacent Land Use									
Ranching									
Remarks									
This site is north of and adjacent to Highway 140. It appears that our site is being used by the adjacent owners. This ground should be evaluated for surplus.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
2.80		22.7							
Material Use									
Oiling (1950)									



Location of the small gravel site along Highway 140.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Lake					11	0431	1.1	38S	20.0E	23
File ID		Source #	Date Visited	Map #		Type of Site				
10526		19-077-4	06/28/2000	1R-2-1318		Gravel				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42°15'16.79000"	120°19'53.62000"	1585	3.48	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color	Weathering		Jointing					
Volcanic Gravel	NA	NA	NA		NA					
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Poor			NA	120						
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	Adjacent to Warner Creek					
Adjacent Land Use										
Open Space										
Remarks										
This site is located north of Highway 140. The Federal Highway Commission was building a new alignment for Highway 140 and blocked my access to evaluate this site. The property is adjacent to Warner Creek. Possible wetland mitigation site.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



Looking to the southwest at the gravel site along Warner Creek.

Close-up view of the gravel with the camera case for scale.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Lake				11	0431	51.45	40S	27.0E	27
File ID		Source #	Date Visited	Map #			Type of Site		
		19-078-4	06/28/2000	10C-41-5, 10C-41-2			Borrow		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
42°03'55.72355"	119°31'55.08707"	1589.528	40	<7 acres					
Comments									
GPS acquired in the pit.									
Rock Type	Unit	Color		Weathering			Jointing		
Volcanic Gravel	Qs			NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Good			NA	120	1,200,000	1,944,000			
Potentially Significant Site	Why			Open/Closed	Direction				
No	USA Ground			Closed	NA				
Adjacent Land Use									
Open space									
Remarks									
This is a borrow site along Highway 140. There is a heterogeneous mix of sizes and shapes. The dominant material is caliche (75%) and gravel (25%). There is ample room to work but no screening. Minor waste/stockpile site. The size of the acreage is unknown. USA ground.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
	2.48	14.9		1.6					
Material Use									
EAC (1991)									

W

N

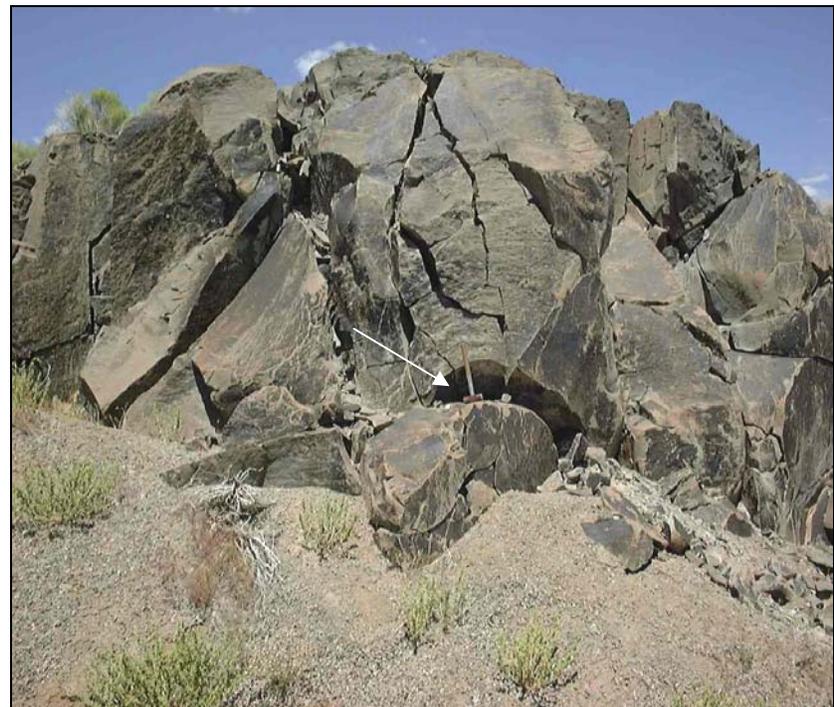
E



View to the north with the suburban in the borrow site along Highway 140.

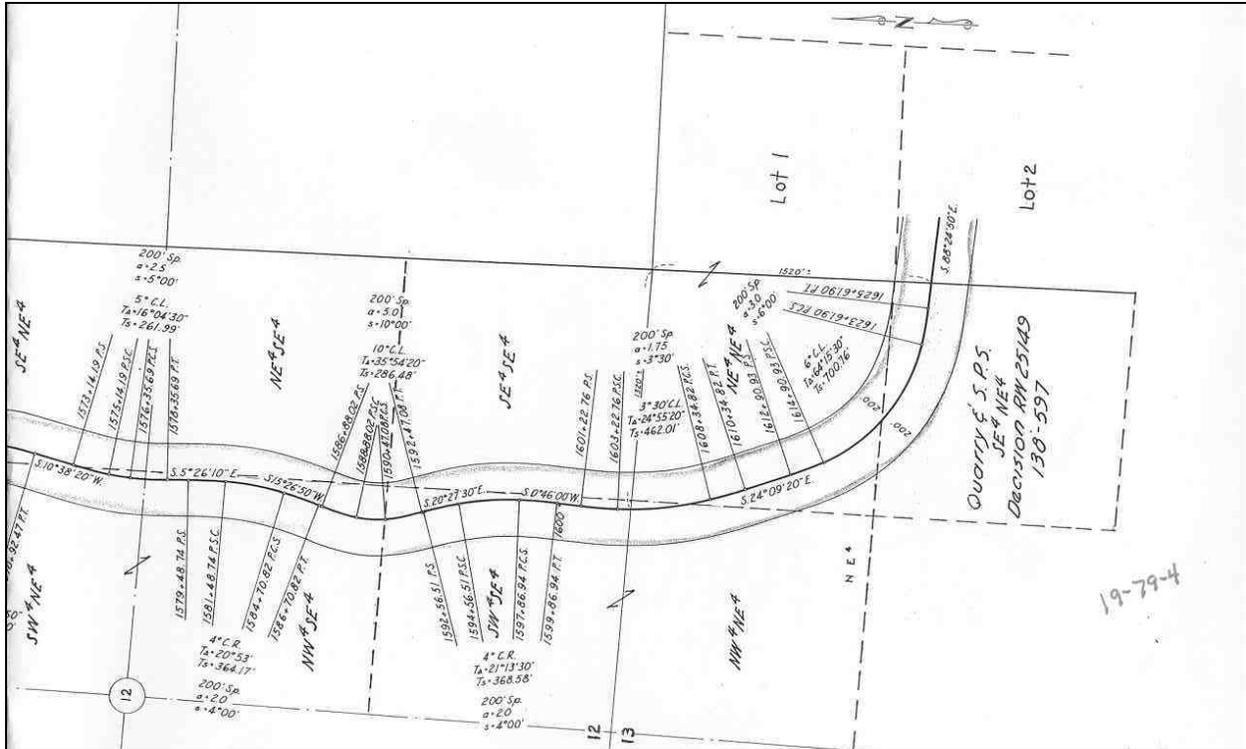
Close-up view of the material at this borrow site with the hammer for scale.

County	Site Name		Dist	Hwy	Mile Pt	TWP	RGE	Sect
Lake	Doherty Slide		11	0431	56.79	41S	27.0E, 28.0E	13, 18
File ID		Source #	Date Visited		Map #		Type of Site	
		19-079-4	06/28/2000		10C-41-2, 10C-41-5		Quarry	
Latitude	Longitude	Elev. (m)	Acreage		Pit Size		DOGAMI Permit #	
42°00'50.91000"	119°28'35.14000"	1889	120		<5 acres		19-0036	
Comments								
Lat. and Long. acquired using Terrain Navigator Software								
Rock Type	Unit	Color		Weathering			Jointing	
Basalt	Tb	Olive Grey (5Y 4/1)		Fresh to Slight			Massive	
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)		
Good to fair			R3+	160	560,000	1,209,600		
Potentially Significant Site	Why			Open/Closed	Direction			
No	USA Ground			Closed	NA			
Adjacent Land Use								
Open space								
Remarks								
This site is located south of Highway 140 at the top of Doherty Slide. This is fine-grain basalt with some alignment of minerals to produce a pseudo-platy fracture. This site has ample room to work with good screening. You would need to drill and blast the rock. You can acquire some rip rap from this site. The terrain slopes gradually away from the highway. USA ground.								
Final Comments								
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.
2.448	2.526	13.9	1.0	4.0	17.0	43.0		
Material Use								
EMUL ASPH AGGREGATE (2001)								



Panoramic view of the quarry site at the top of Doherty Slide.

Close-up view of the massive fracture in the basalt with the hammer for scale.



Aerial view of the quarry site that is adjacent to Highway 140.