

County	Site Name		Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur	Squaw Creek		14	0007	217.3	20S	41.0E	33, 34
File ID		Source #	Date Visited		Map #		Type of Site	
29551		23-019-5	06/13/2001		1R-3-1237		Quarry	
Latitude		Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #	
43 46'53.21177"		117 41'27.01688"	821.524	120	<3		23-0146	
Comments								
GPS acquired in the pit.								
Rock Type	Unit	Color		Weathering		Jointing		
Basalt	Tif	Medium Grey (N5)		Fresh to Moderate		Massive to Highly Fractured		
Quality			Hardness	lbs./cu ft.	Reserve (cy)		Reserve (Tons)	
Good			R3+	166	968,000		2,169,288	
Potentially Significant Site	Why			Open/Closed	Direction			
No	USA Ground			Closed	Squaw Creek bisects the ground.			
Adjacent Land Use								
Open Space								
Remarks								
This site is adjacent to and south of Highway 20. The pit is south of the highway approximately 500 meters. The rock here is a fine-grain basalt of multiple flows. The basalt ranges from fresh to decomposing and highly fractured to massive. There is ample room to work with limited screening. You can rip the rock and all future work should proceed from the top down. There is a lot of gravel at this location from the intermittent Squaw Creek. The terrain is moderate to steep.								
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.
2.42	2.45	20.0	0.4	1.3			16.8	0.3
Material Use								
AC (1989)								

NW

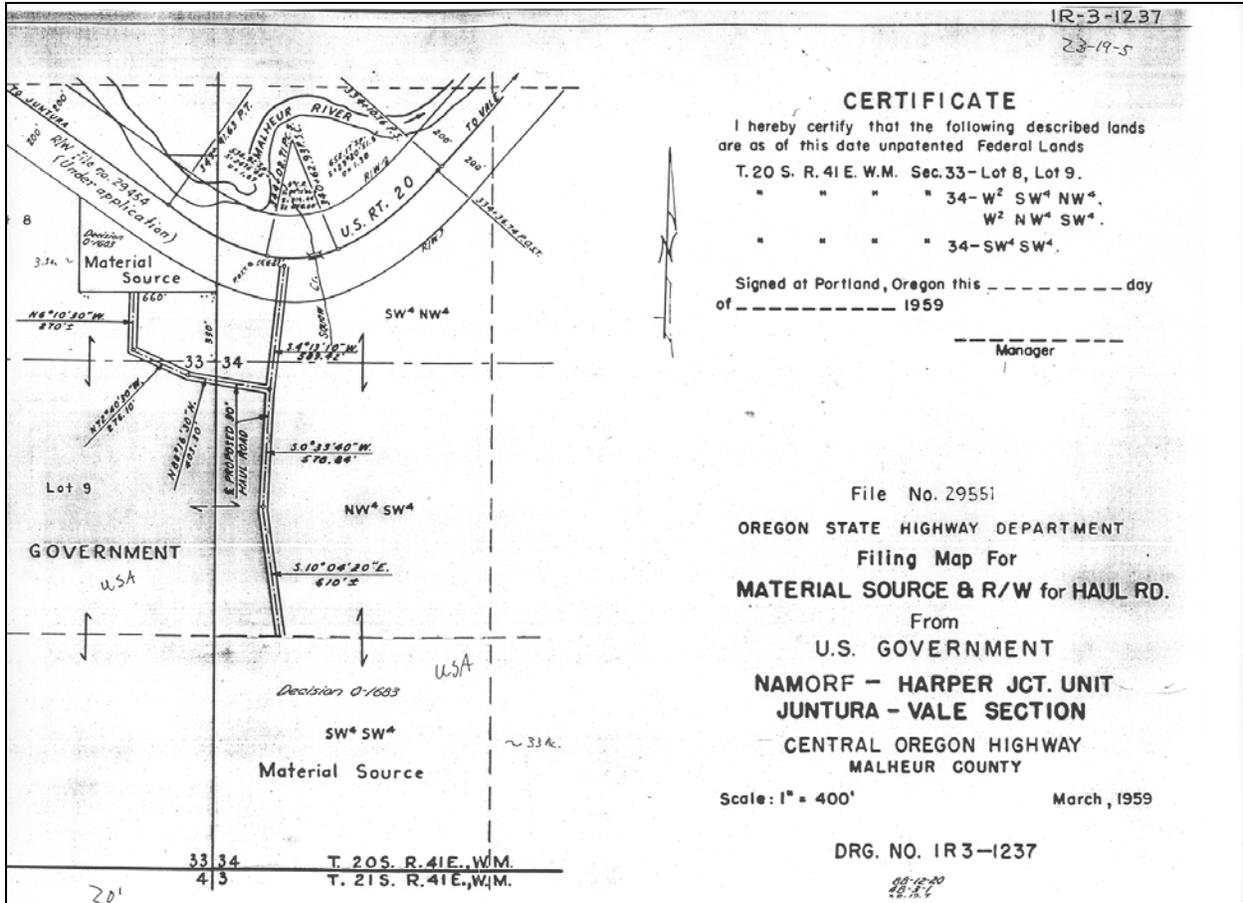
SW



View of the quarry site that is south of Highway 20.



Close-up view of the pit face, notice the fracture pattern.



IR-3-1237
23-19-5

CERTIFICATE

I hereby certify that the following described lands are as of this date unpatented Federal Lands

T.20 S. R. 41 E. W.M. Sec.33-Lot 8, Lot 9.
 " " " " 34-W² SW⁴ NW⁴.
 " " " " W² NW⁴ SW⁴.
 " " " " 34-SW⁴ SW⁴.

Signed at Portland, Oregon this _____ day of _____ 1959

Manager

File No. 29551
 OREGON STATE HIGHWAY DEPARTMENT
 Filing Map For
MATERIAL SOURCE & R/W for HAUL RD.
 From
 U.S. GOVERNMENT
NAMORF - HARPER JCT. UNIT
JUNTURA - VALE SECTION
 CENTRAL OREGON HIGHWAY
 MALHEUR COUNTY

Scale: 1" = 400' March, 1959

DRG. NO. IR3-1237
 23-19-5



Aerial view of the quarry site located south of Highway 20 along Squaw Creek.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur				14	0007	220.5	20S	41.0E	13, 24
File ID		Source #	Date Visited	Map #			Type of Site		
11751, 11734		23-020-5	06/12/2001	1R-2-1500, 1R-2-1501			Gravel		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #				
43 49'21.05000"	117 38'41.89000"	778	13.34	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)			
Good to Fair			NA	120	50,000	75,000			
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			Closed	Adjacent to the Malheur River				
Adjacent Land Use									
Open Space/ Farming									
Remarks									
This site is located adjacent to and northwest of Highway 20 along the old highway alignment. The material is composed of volcanic gravel (40%) and sand/silt (60%). The terrain is fairly flat with minor room to work and no screening. The site sits about 5 feet above the new alignment.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

E

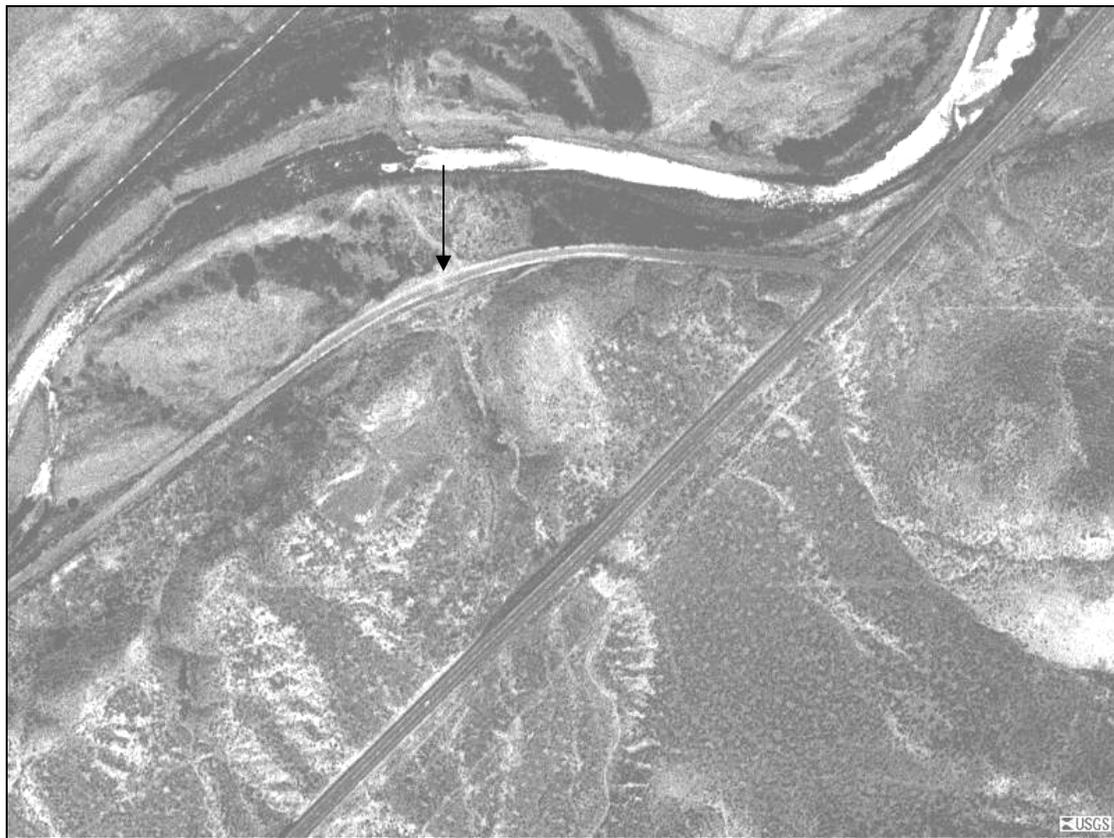
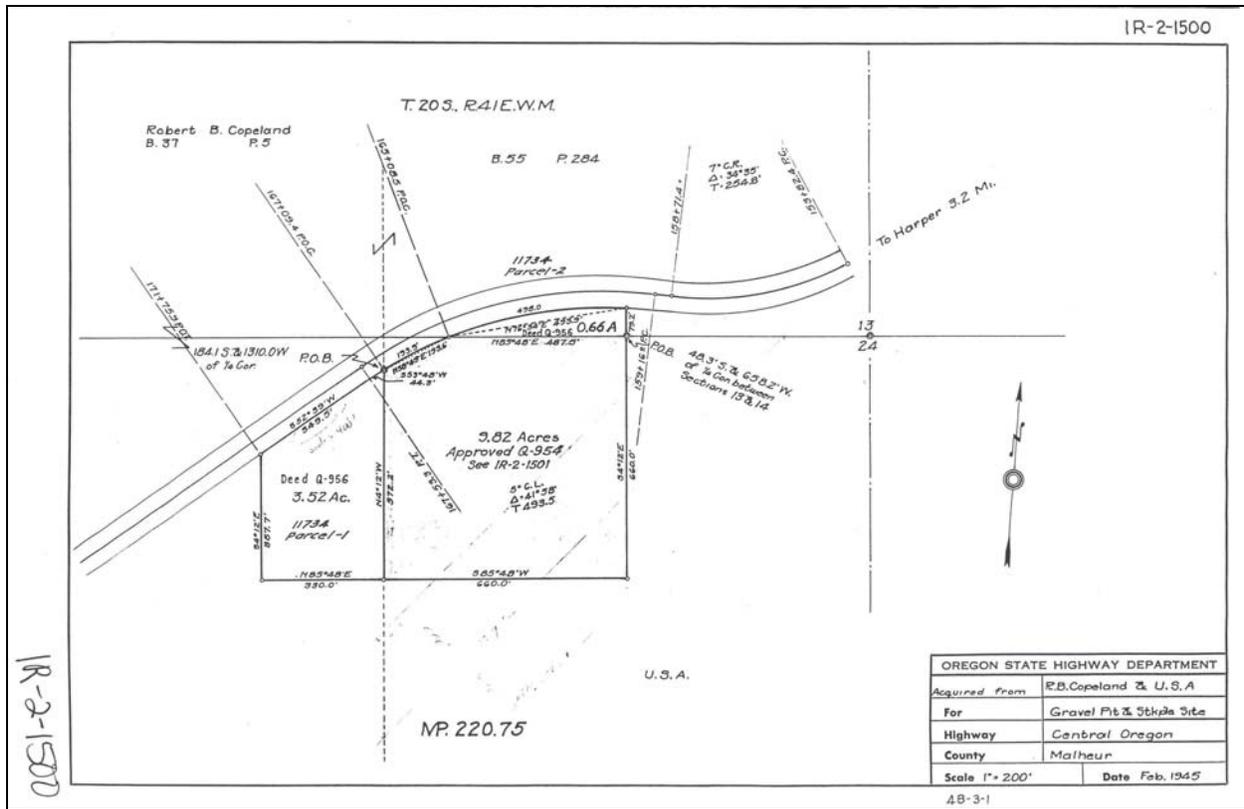
W



View of the gravel site along the old alignment for Highway 20.



Close-up view of the material at this site.



Aerial view of the gravel site along the old alignment for Highway 20.

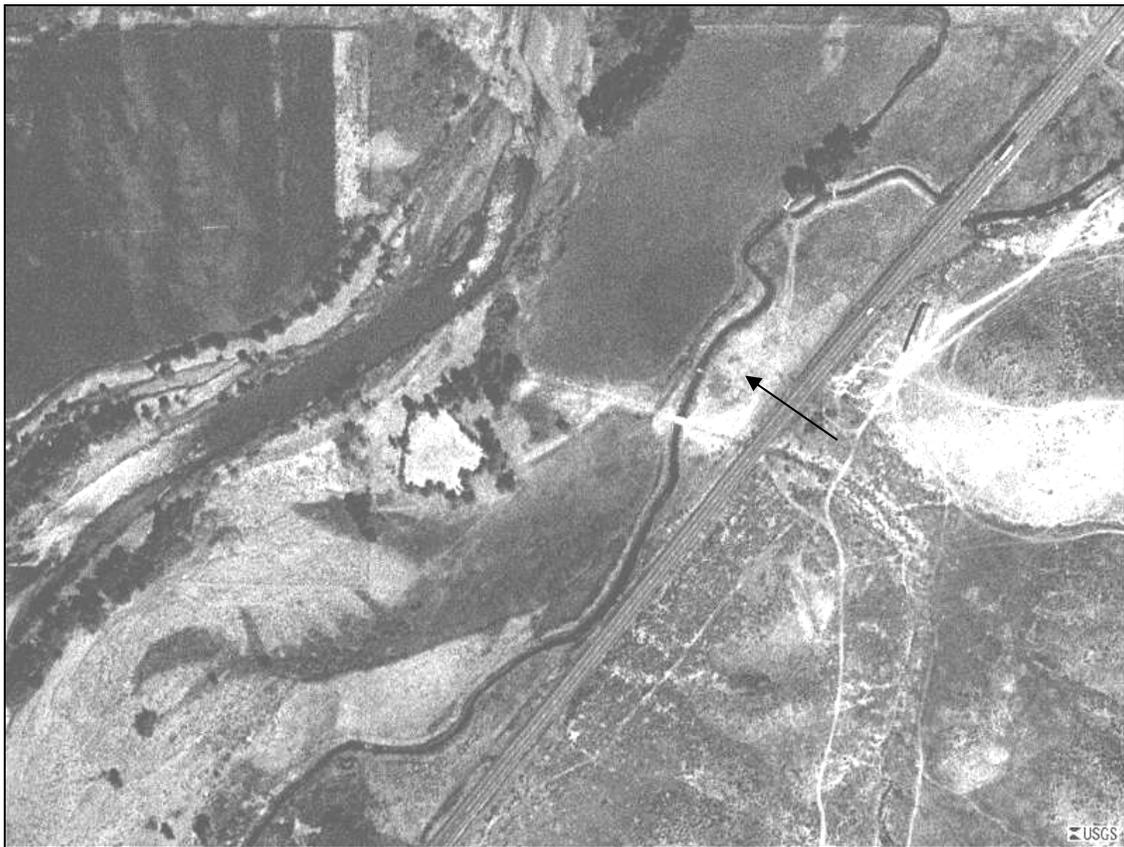
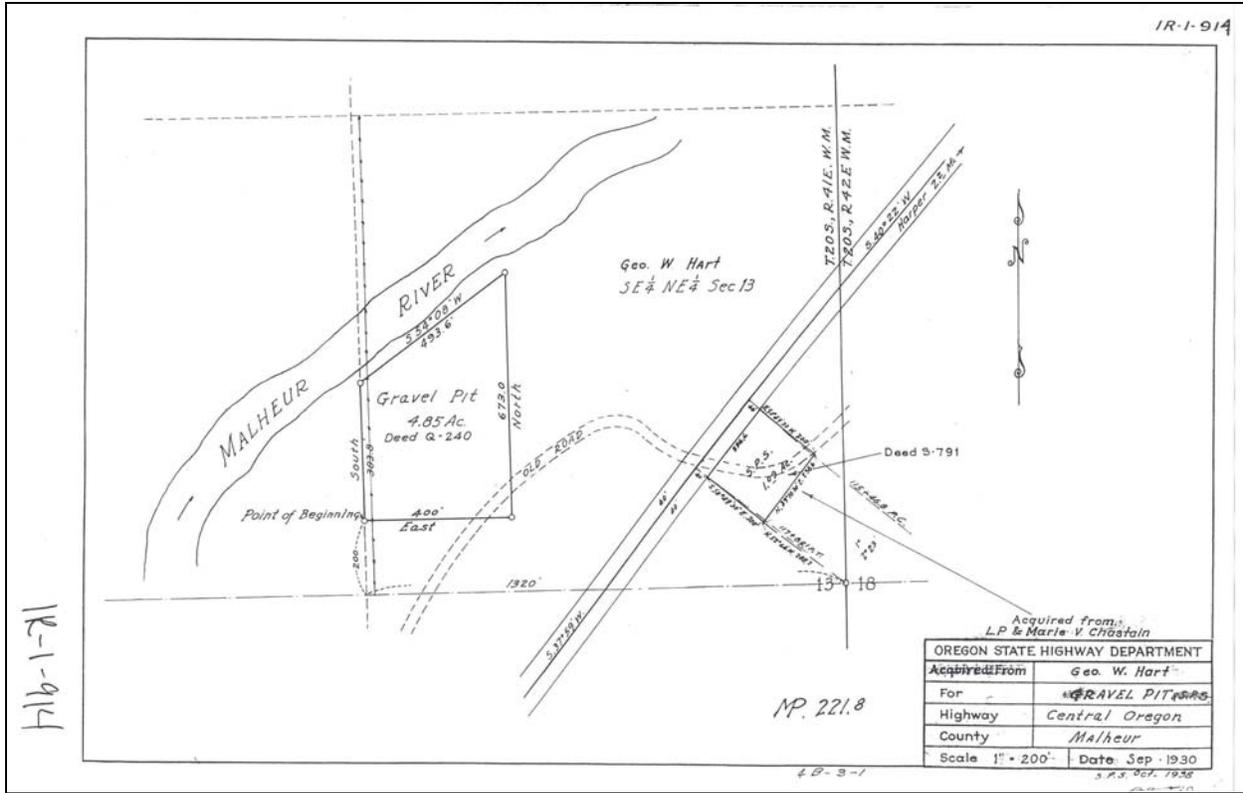
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur				14	0007	221.5	20S	41.0E	13
File ID		Source #	Date Visited	Map #			Type of Site		
Q0240, 06428		23-021-5	06/12/2001	1R-1-914			Gravel		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
43 49'51.02000"	117 38'16.30000"	770	4.85	<1					
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)			
Good			NA	120					
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			Closed	Adjacent to the Malheur River				
Adjacent Land Use									
Farming									
Remarks									
This site is located northwest of Highway 20 about 200 meters. There is a small pond at this site now. The terrain is flat and at the river elevation. This site has wetland potential.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

S

N



View of the gravel site that has filled with water to form a small pond.



Aerial view of the gravel site that is adjacent to the Malheur River and Highway 20.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur	Harper Jct.				14	0007	223.8	20S	42.0E	08
File ID		Source #	Date Visited	Map #			Type of Site			
24925		23-022-5	06/12/2001	1R-5-890			Gravel			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
43 50'59.51000"	117 36'24.13000"	797	20	<7						
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)			
Good to Fair			NA	120	30,000		45,000			
Potentially Significant Site	Why		Open/Closed		Direction					
No	USA Ground		Closed		Northwest about 500 meters is the Malheur River.					
Adjacent Land Use										
Open Space										
Remarks										
This site is located southeast of Highway 20 about 0.5 miles. The ground is controlled by Malheur County (Transfer Station) and the BLM. The material is composed of cobble size and less (40%) gravel and silt (60%). The terrain is gradual with ample room to work and good screening. The county has fenced a large portion of the ground.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.17	2.42	19.2	18.5	3.3			18.5	5.3		
Material Use										
(1977)										

S

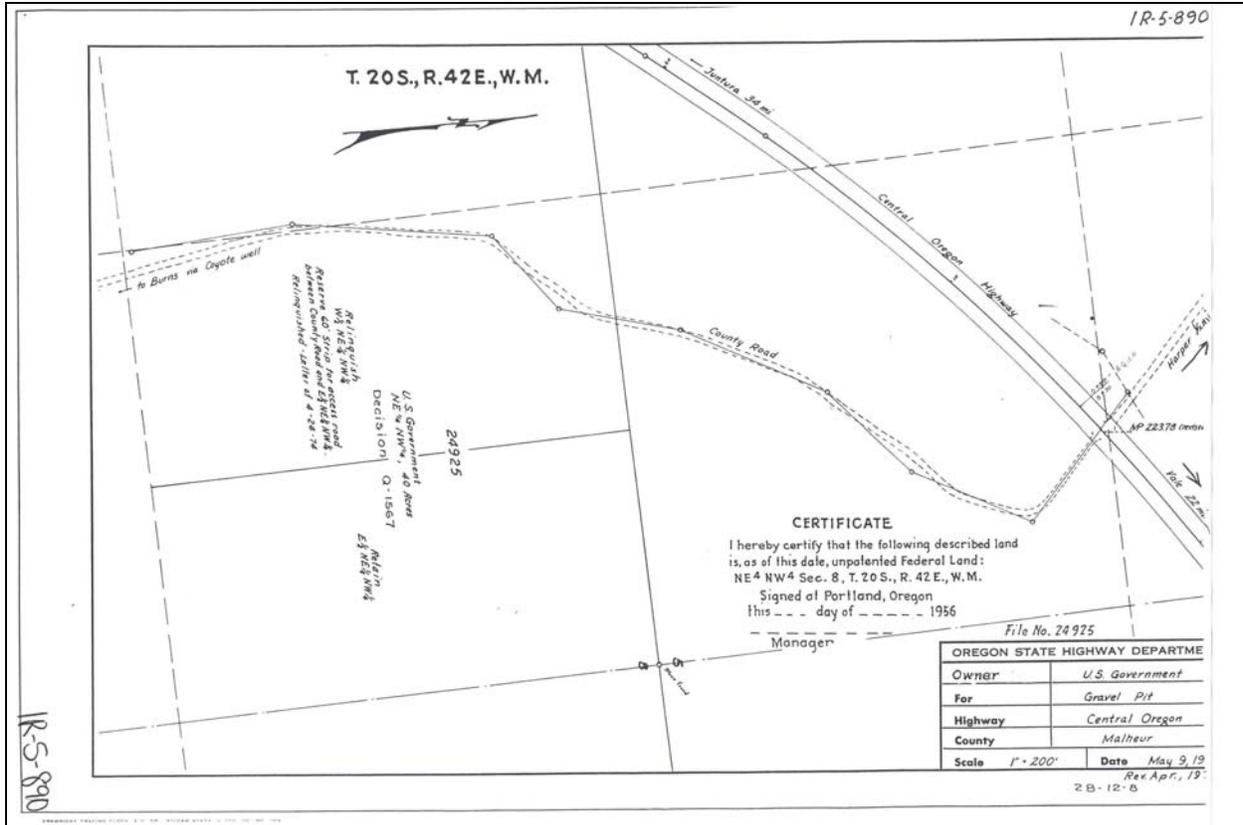
NE



View of the gravel site located southeast of Highway 20 about 0.5 miles.



Close-up view of the material at this location.



Aerial view of the gravel site located southeast of Highway 20.

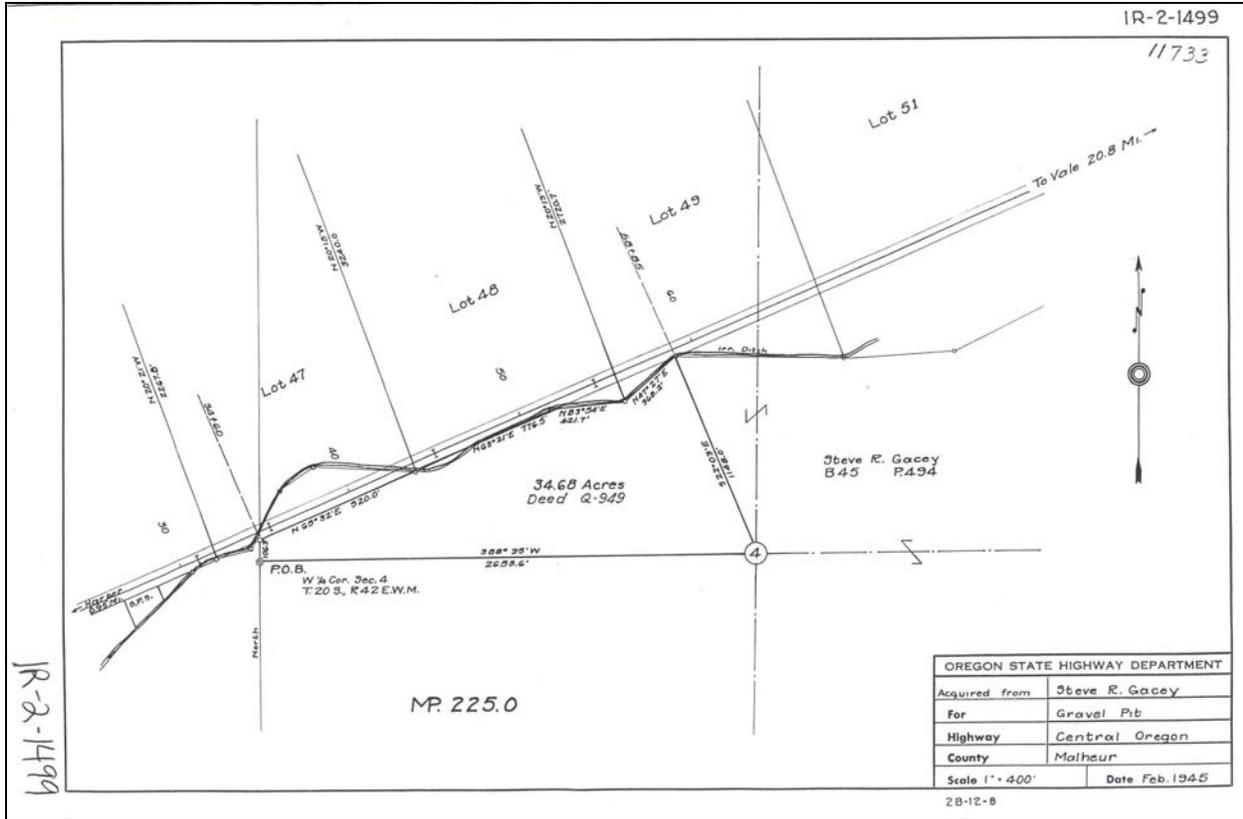
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur					14	0007	224.7	20S	42.0E	04
File ID		Source #	Date Visited		Map #			Type of Site		
11733		23-023-5	06/12/2001		1R-2-1499			Raw Land		
Latitude		Longitude		Elev. (m)	Acreage		Pit Size		DOGAMI Permit #	
43 51'38.02000"		117 35'23.50000"		788	34.68		NA			
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type		Unit	Color		Weathering			Jointing		
Volcanic Colluvium		QTg	NA		NA			NA		
Quality				Hardness	lbs./cu ft.		Reserve (cy)		Reserve (Tons)	
Unknown				NA	120		30,000		45,000	
Potentially Significant Site		Why			Open/Closed		Direction			
No		NA			Closed		Adjacent to the irrigation ditch			
Adjacent Land Use										
Farming/ Open Space										
Remarks										
This site is adjacent to and south of Highway 20. There is no access to this property over the irrigation ditch. It appears that the gravel is cobble size and less with a large portion of sand/silt and tuffs. There would be room to work with no screening. The terrain is gradual.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.49	2.57	18.1	3.4	2.7			12.5	0.7		
Material Use										
AC (1989)										

E

W



View of the raw land site located adjacent to the south of Highway 20.



Aerial view of the raw land site south of Highway 20.

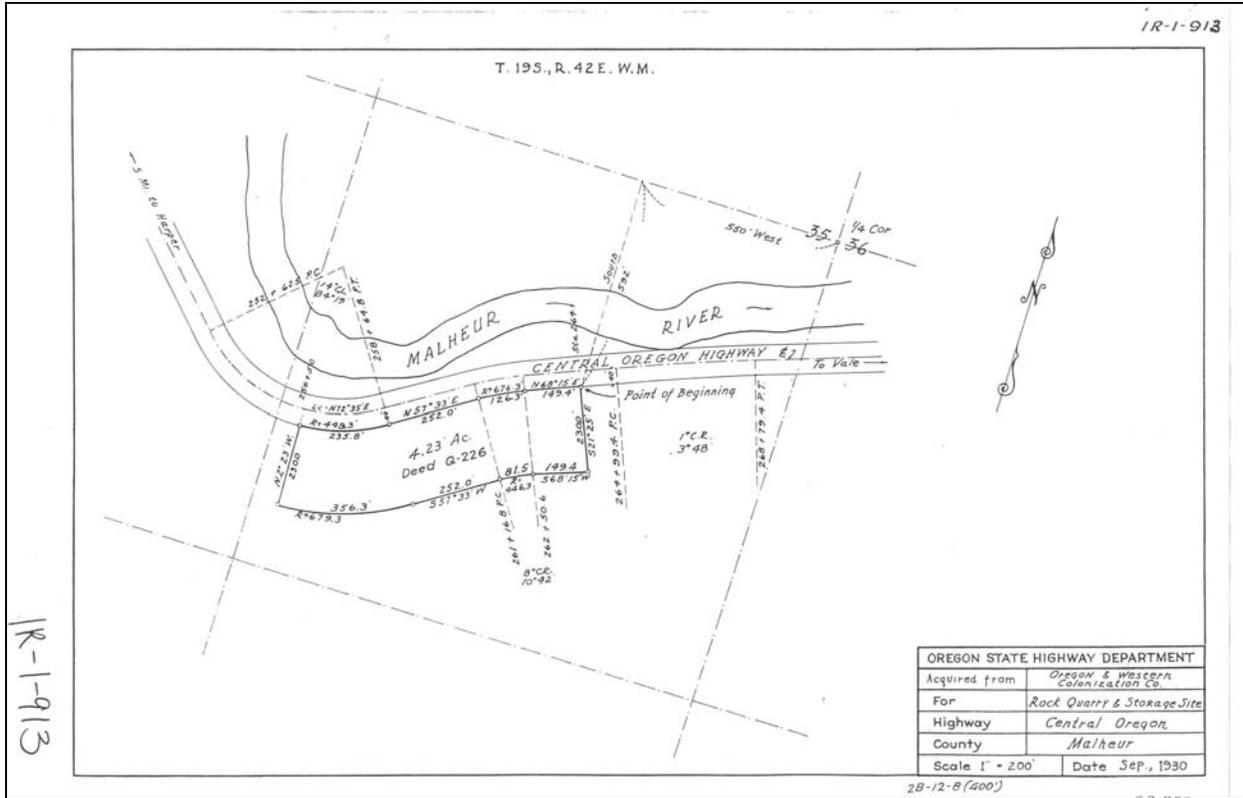
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur				14	0007	228.4	19S	42.0E	35
File ID		Source #	Date Visited	Map #			Type of Site		
Q0226		23-024-5	06/12/2001	1R-1-913			Road Cut		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
43 52'23.23000"	117 31'47.18000"	749	4.23	NA					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color	Weathering			Jointing			
Basalt	Tb in Tlf	Medium Grey (N5)	Slight			Massive to Moderate Fracture			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Fair to Good			R3+	179	70,000	169,155			
Potentially Significant Site	Why			Open/Closed	Direction				
No	Too Small			Closed	70 meters north is the Malheur River				
Adjacent Land Use									
Open Space									
Remarks									
This site is located adjacent to and south of Highway 20. The rock here is a fine-grain, moderately fractured basalt. This site is a small road cut along the Malheur River. No screening, with limited room to work. Part of the old highway alignment is used as a waste rock site.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

E

SE



View of the small road cut along Highway 20 and the Malheur River.



Aerial view of the road cut along Highway 20 and the Malheur River.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur					14	0007	232.9	19S	43.0E	28
File ID		Source #	Date Visited	Map #		Type of Site				
Q0590		23-025-5	08/14/2001	1R-2-590		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
43 53'24.98662"	117 27'13.32604"	884.083	40	<5						
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color		Weathering		Jointing				
Basalt	Tba	Medium Grey (N5)		Slight to Fresh		Highly Fractured				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair to Poor			R3+	172	50,000	75,000				
Potentially Significant Site	Why			Open/Closed	Direction					
No	USA Ground			Closed	NA					
Adjacent Land Use										
Open Space										
Remarks										
Highway 20 bisects this ground at Vines Hill Summit. The rock here is a very platy, fine-grain basalt. You can rip the material and acquire minor rip rap. The terrain is gradual with limited screening and room to work. There are multiple flows with some of poor quality. 60,000 cubic yards have been removed.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

SE

N



View of the quarry site at Vines Hill Summit on Highway 20.



Close-up view of the quarry face and the very platy basalt.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur	Greenfield			14	0007	240.7	19S	44.0E	04
File ID		Source #	Date Visited	Map #			Type of Site		
23443, 23577		23-026-5	06/12/2001	1R-5-705			Borrow		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
43 56'32.19565"	117 19'35.09214"	736.547	5.26	<1					
Comments									
GPS acquired on site.									
Rock Type	Unit	Color		Weathering			Jointing		
Volcanic Gravel	QTg	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Good			NA	120	10,000	15,000			
Potentially Significant Site	Why			Open/Closed	Direction				
No	Too Small			Closed	Bully Creek is 200 meters to the west				
Adjacent Land Use									
Farming									
Remarks									
This site is located north of Highway 20 about 0.75 miles. This site occupies a topographic high, with the material composed of volcanic gravel. There is about 80% small boulder size and less and 20% sand/silt. The dominant size is small cobble with some gravel, prismatic in shape. There is no screening from the county road and limited room to work. There is a small irrigation ditch that bisects the pit floor and has created a wetland environment.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

N

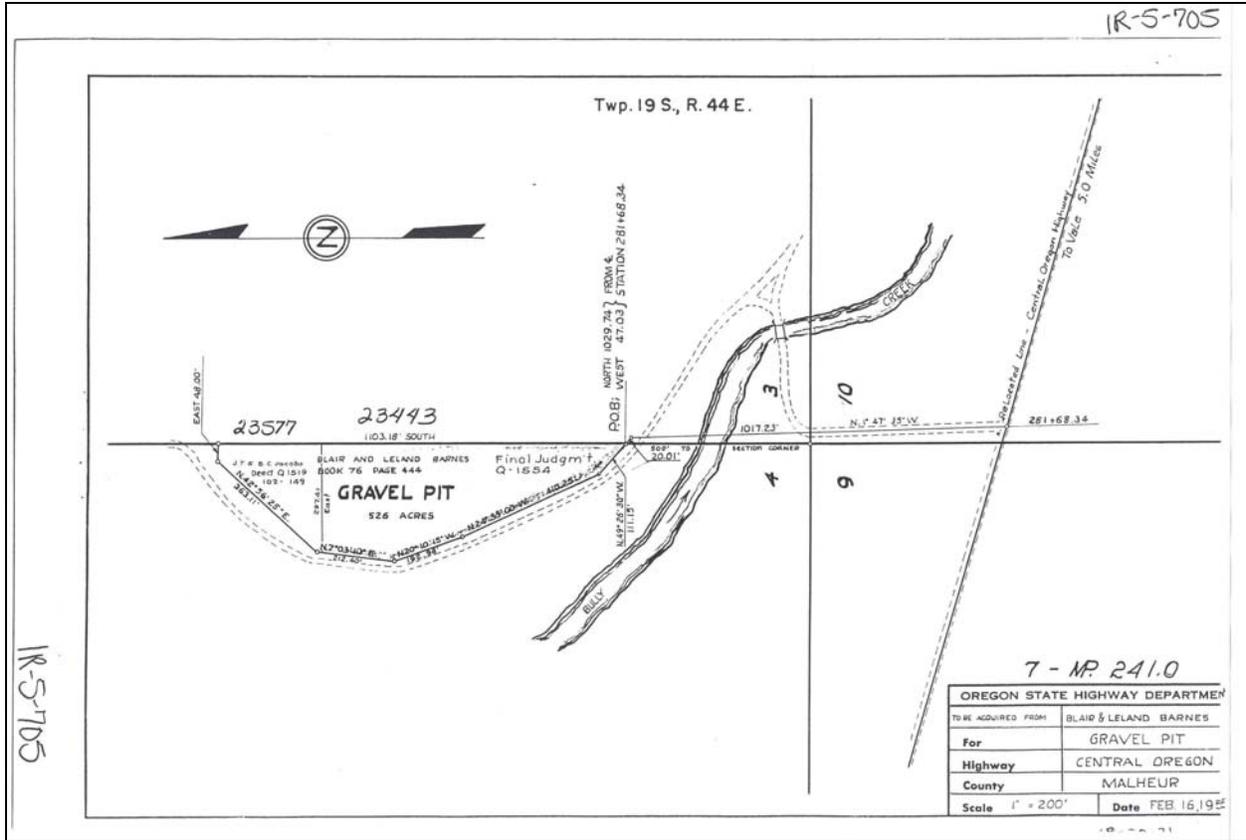
SE



View of the borrow site along a county road 0.75 miles north of Highway 20.



Close-up view of the aggregate at this site.



Aerial view of the borrow site located adjacent to the county road.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur					14	0007	244	18S	44.0E	36
File ID		Source #	Date Visited	Map #			Type of Site			
23403		23-027-5	06/12/2001	1R-5-703			Borrow			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
43 58'02.78417"	117 17'04.53626"	723.545	5.79	NA						
Comments										
GPS acquired on site.										
Rock Type	Unit	Color		Weathering			Jointing			
Volcanic Gravel	Otg	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good			NA	120	160,000	259,200				
Potentially Significant Site	Why			Open/Closed	Direction					
No	Too Small			Closed	NA					
Adjacent Land Use										
Farming										
Remarks										
This site is located west of Highway 20 about 0.5 miles on Bench Road. The site occupies a topographic high, with the material composed of volcanic gravel, cobble size and less (80%) and sand/silt (20%). There is limited room to work with some screening. The terrain is flat on top. There is no sign, gate or fencing.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
		21.4								
Material Use										
(1979)										

SW

E



View of the borrow site on Bench Road.



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

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur					14	0451	10.1	18S	45.0E	30
File ID		Source #	Date Visited	Map #			Type of Site			
06432		23-029-5	06/12/2001	1R-2-748			Stock Pile Site			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #				
43 58'54.39067"	117 15'50.79702"	722.215	8.92	NA						
Comments										
GPS acquired on site.										
Rock Type	Unit	Color		Weathering			Jointing			
NA	QTg	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
NA			NA	120						
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	Adjacent to an irrigation ditch					
Adjacent Land Use										
Residential adjacent										
Remarks										
This is a Maintenance stockpile site about 0.5 miles west of the Vale Maintenance yard. Surplus?										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

SW

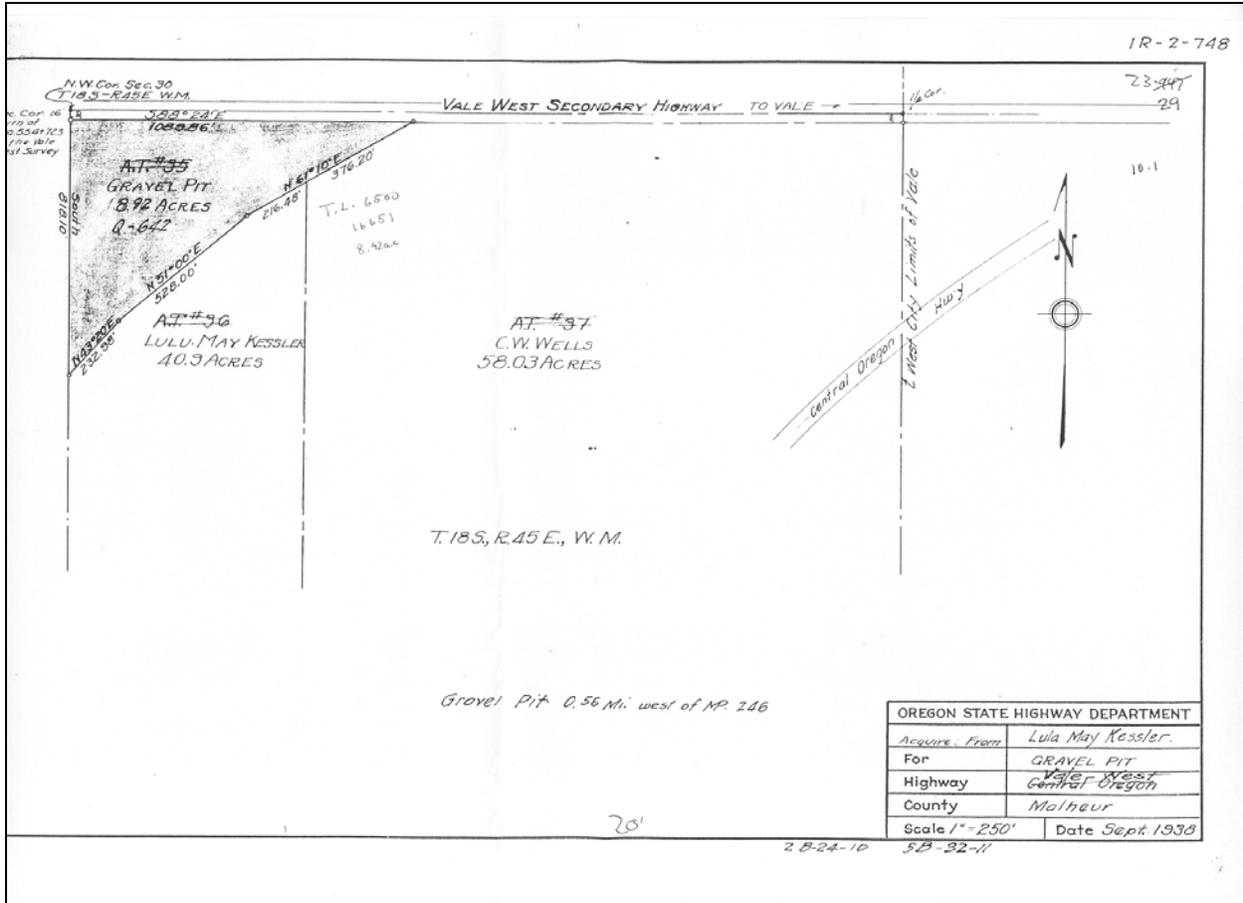
NW



View of the stock pile site used by the Vale Maintenance Department.



Close-up view of the material at this site.



Aerial view of the stock pile site located west of the Vale Maintenance yard.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur				14	0007	254	18S	46.0E	28
File ID		Source #	Date Visited	Map #			Type of Site		
21677, 21676, 21678		23-030-5	06/13/2001	1R-5-497			Gravel		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
43 58'01.62643"	117 05'47.99098"	742.626	59.07	<3					
Comments									
GPS acquired at the access point.									
Rock Type	Unit	Color		Weathering			Jointing		
Volcanic Gravel	QTg	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Good			NA	140	200,000	300,000			
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			Closed	Dry draw bisects the ground				
Adjacent Land Use									
Rural Residential									
Remarks									
This site is located about one mile south of Highway 20/26 off of Morgan Avenue. The material is composed of cobble size and less volcanic gravel (60%) and (40%) sand/silt. The site occupies both sides of a dry draw. There might be some wetland potential associated with the haul road and the ground. The site should be evaluated for aggregate purposes. We would need to fence and post new signs. There is room to work with no screening.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

S

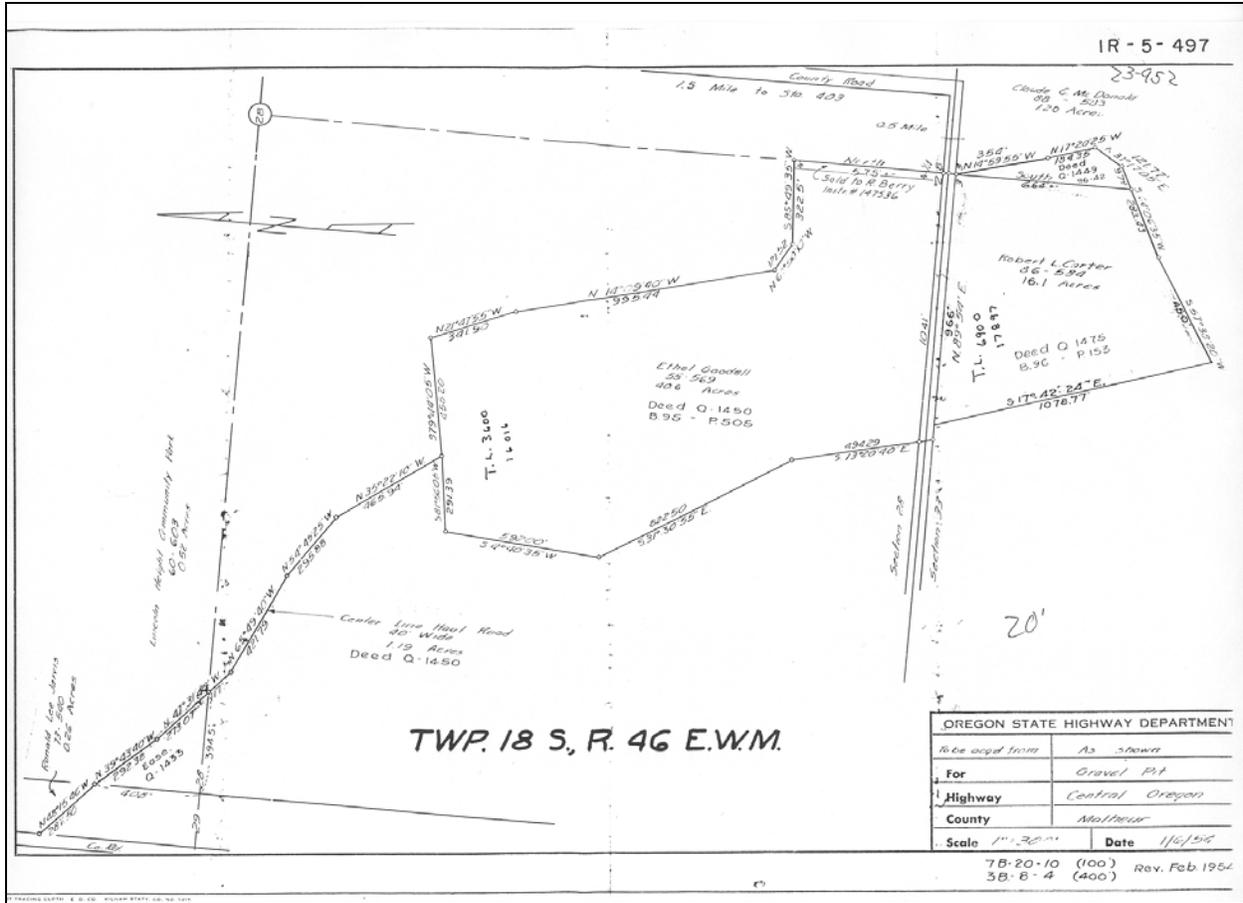
NE



View of the gravel site located south of Highway 20/26.



Close-up view of the gravel at this site.



Aerial view of the gravel site off of Morgan Ave.

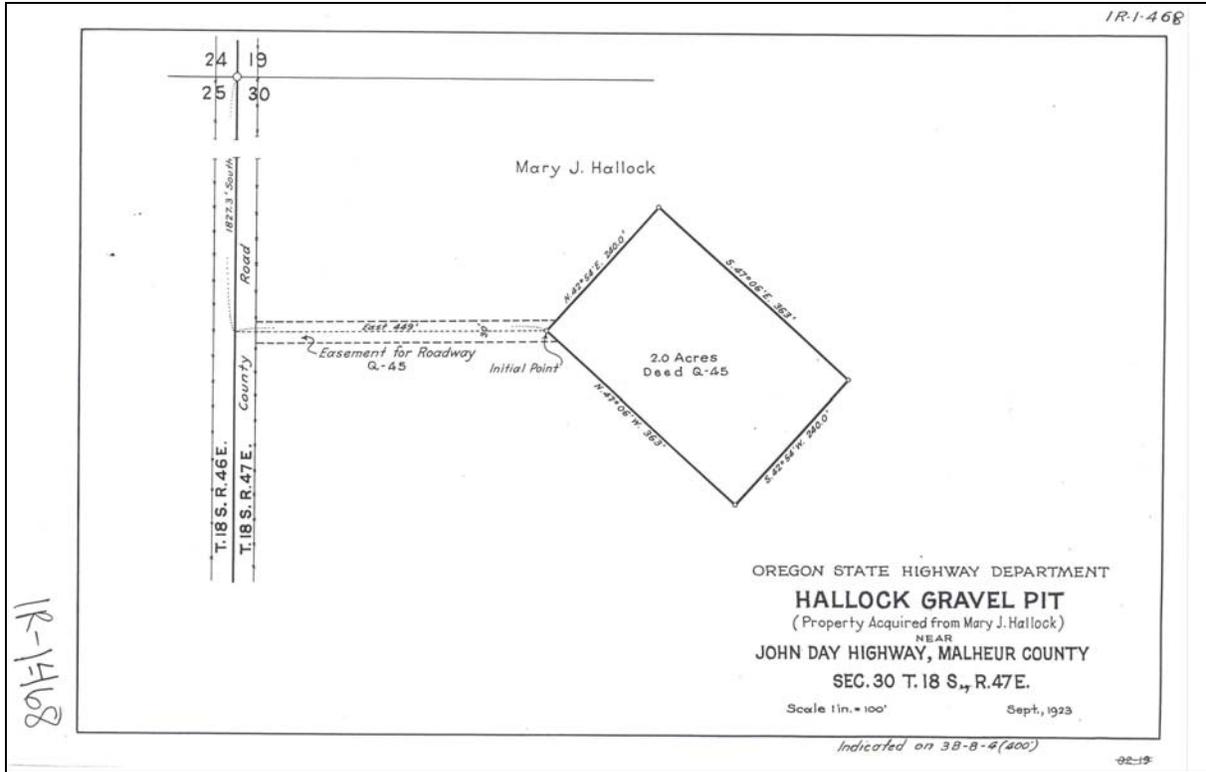
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur	Hallock Pit				14	0006	257.2	18S	47.0E	30
File ID		Source #	Date Visited	Map #			Type of Site			
Q0045		23-031-5	06/14/2001	1R-1-468			Borrow			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
43 58'34.18000"	117 01'23.07000"	680	2	<1						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
Volcanic Gravel	QTg	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										
Farming										
Remarks										
This site is located west of Highway 20/26 about one mile off of Clark County Road. There is a one acre pond associated with the site and the rest of the ground is used by the adjacent owner. They are de-watering the pit for irrigation of the surrounding area. There is no fence, gate, or sign. This site has wetland potential. Surplus?										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.838	2.796	20.5		1.0	12.4	0.2				
Material Use										
Emuls Asph Aggregate (1996)										

S

W



View of the borrow site being used by the adjacent land owner for irrigation purposes.



Aerial view of the borrow site containing a small pond.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur					14	0006	260.7	19S	47.0E	06
File ID		Source #	Date Visited	Map #		Type of Site				
Q0223		23-033-5	06/14/2001	1R-1-684		Gravel				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
43 57'08.28000"	117 01'31.81000"	692	2.6	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color	Weathering			Jointing				
Volcanic Gravel	QTg	NA	NA			NA				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
NA			NA	120						
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			NA	NA					
Adjacent Land Use										
Farming										
Remarks										
This site is located west of Highway 20/26 about one mile, south of King Avenue. The site is used as a dumping ground for some of the local farmers. There is no sign, fencing, or gate.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

SE

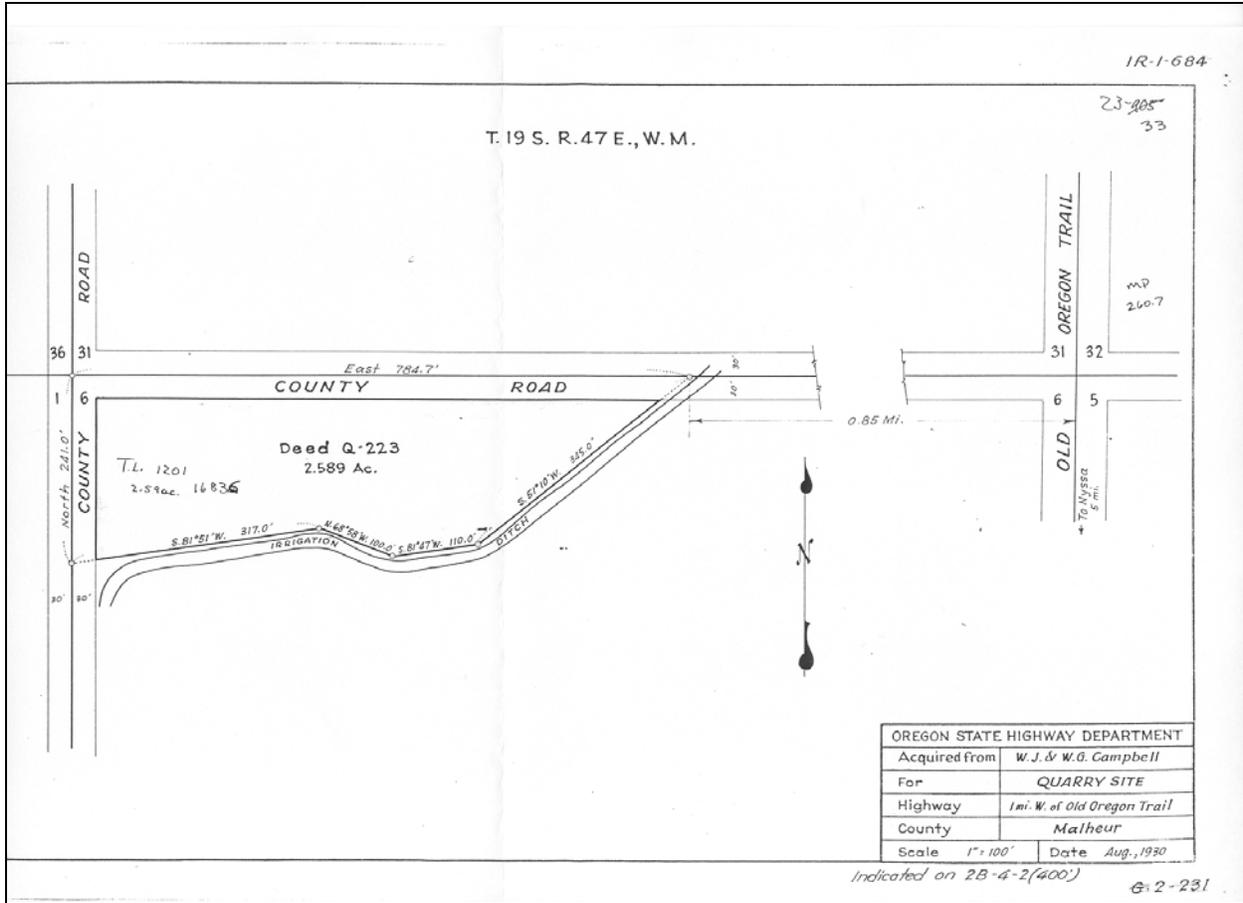
W



View of the gravel site south of King Avenue.



Close-up view of the material being dumped at this site.



Aerial view of the site south of King Avenue.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur				14	0007	262.7	19S	47.0E	18
File ID		Source #	Date Visited	Map #			Type of Site		
Q0084		23-034-5	06/14/2001	1R-1-507			Gravel		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
43 55'24.42528"	117 00'43.64791"	692.995	5.36	NA					
Comments									
GPS acquired at the access point.									
Rock Type	Unit	Color		Weathering			Jointing		
Volcanic Gravel	QTg	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
NA			NA	120					
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			NA	NA				
Adjacent Land Use									
Farming									
Remarks									
This site is located about 3/8 of a mile west of Highway 20/26 off of Gem Avenue. This site has been reclaimed and is used as a stock pile and waste rock site. There is wetland potential for this location. No gate.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

SW

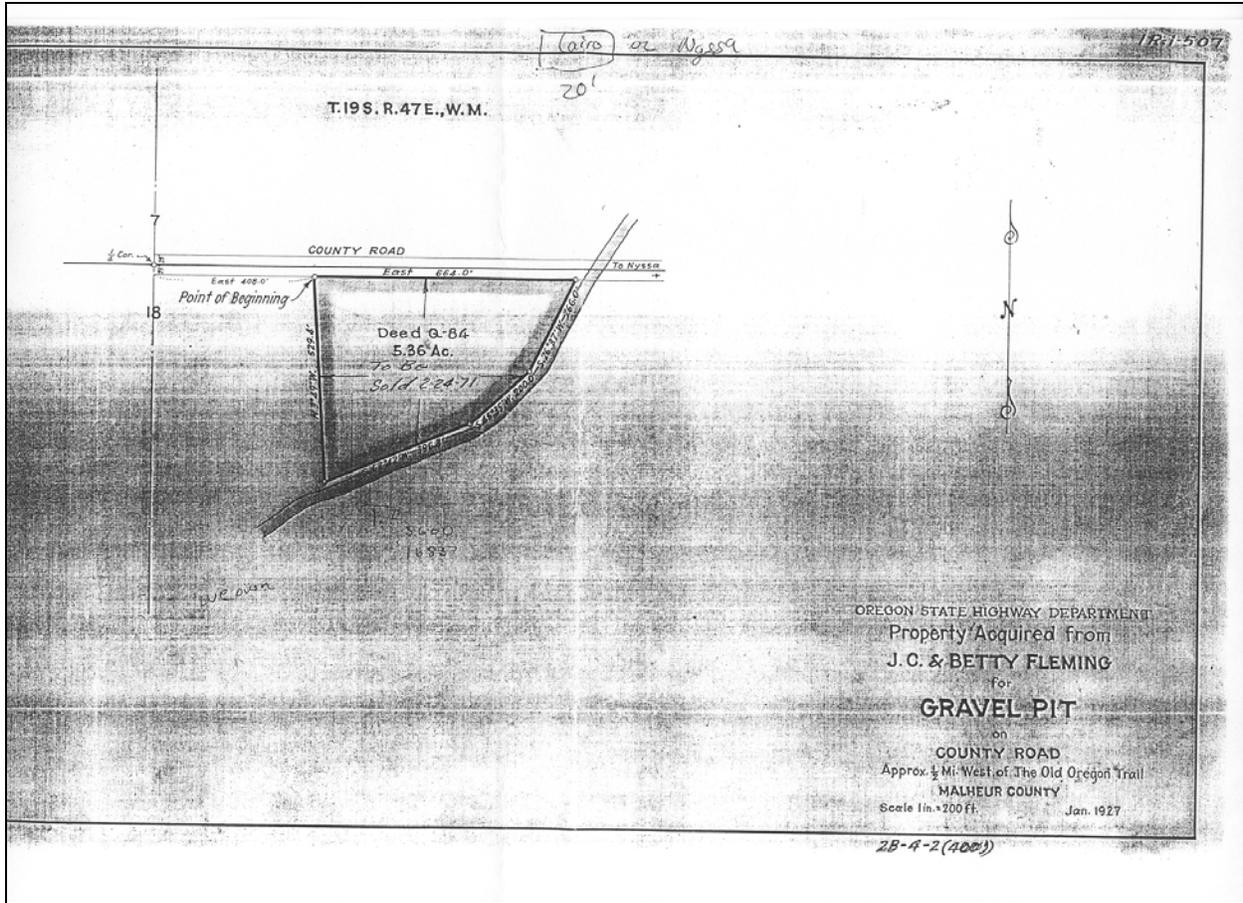
NW



View of the gravel site that has been reclaimed and used as a stock pile and waste rock site.



Close-up view of the wetland potential at this site.



Aerial view of the site being used for waste rock and stock piles.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur				14	0455	264.7	19S	46.0E	24
File ID		Source #	Date Visited	Map #			Type of Site		
16397, 16398, 16399		23-035-5	06/14/2001	1R-5-11			Gravel		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
43 53'53.96000"	117 02'09.46000"	699	7.5	<5					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
Volcanic Gravel	QTg	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Good			NA	120	113,000	183,060			
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			Closed	NA				
Adjacent Land Use									
Farming									
Remarks									
This site is located approximately 1.5 miles west of Highway 20/26 and north of Columbia Avenue. There is no access to this site over the irrigation ditch. The site has the potential for more aggregate.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
2.46	2.57	22.2	3.8	2.4			7.2	0.9	
Material Use									
(1977)									

NW

E



View of the site on the other side of the irrigation ditch.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur					14	0442	74.2	30S	38.0E	16
File ID		Source #	Date Visited		Map #			Type of Site		
14166		23-038-5	08/01/2001		1R-2-1776			Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42 58'13.87258"	118 03'55.83371"	1423.182	60	<6	23-0125					
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color		Weathering			Jointing			
Basalt	Qf	Olive Grey		Slight			Highly Fractured			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair			R3	164	1,400,000	3,099,600				
Potentially Significant Site	Why			Open/Closed	Direction					
No	USA Ground			Closed	NA					
Adjacent Land Use										
Open Space										
Remarks										
This site is located west of and adjacent to Highway 78. The rock here is a fine-grain, very platy basalt. The terrain is gradual with ample room to work and limited screening. You can rip the rock.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.44	2.45	15.3	5.1	2.0	42.7	0.7	12.8	0.6		
Material Use										
Quarry Rock (1996)										

SE

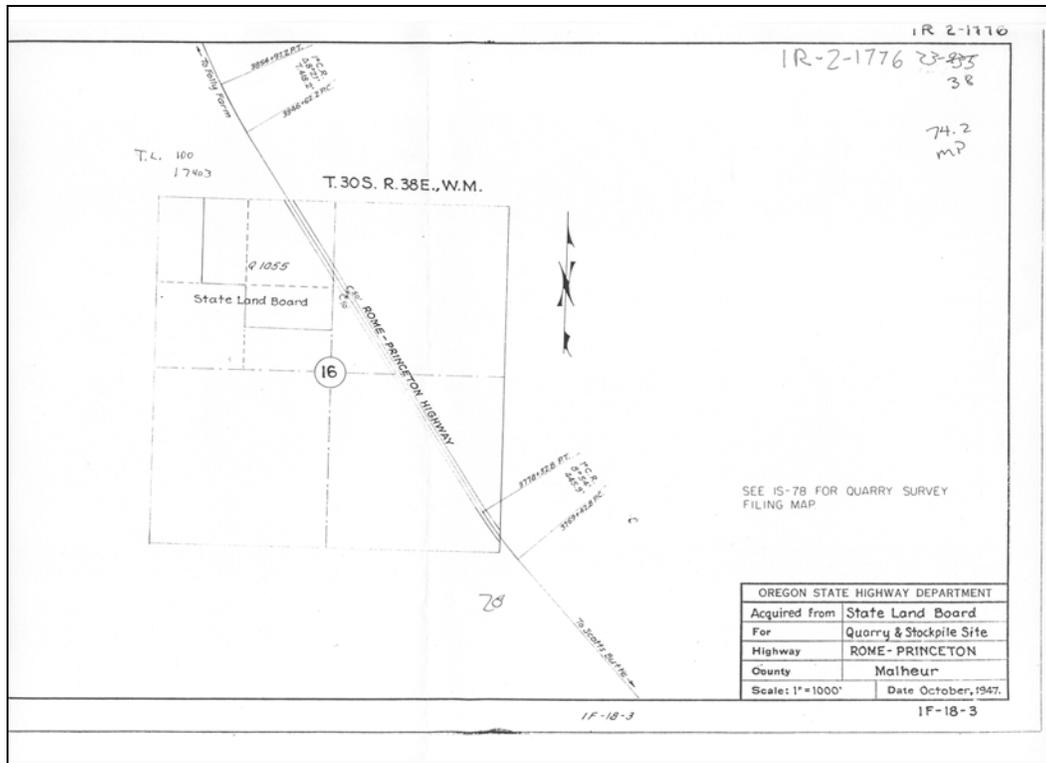
E



View of the 60 acre quarry site located west of Highway 78.



Close-up view of the basalt at this location.



DOGAMI aerial view of the quarry site located west of Highway 78.

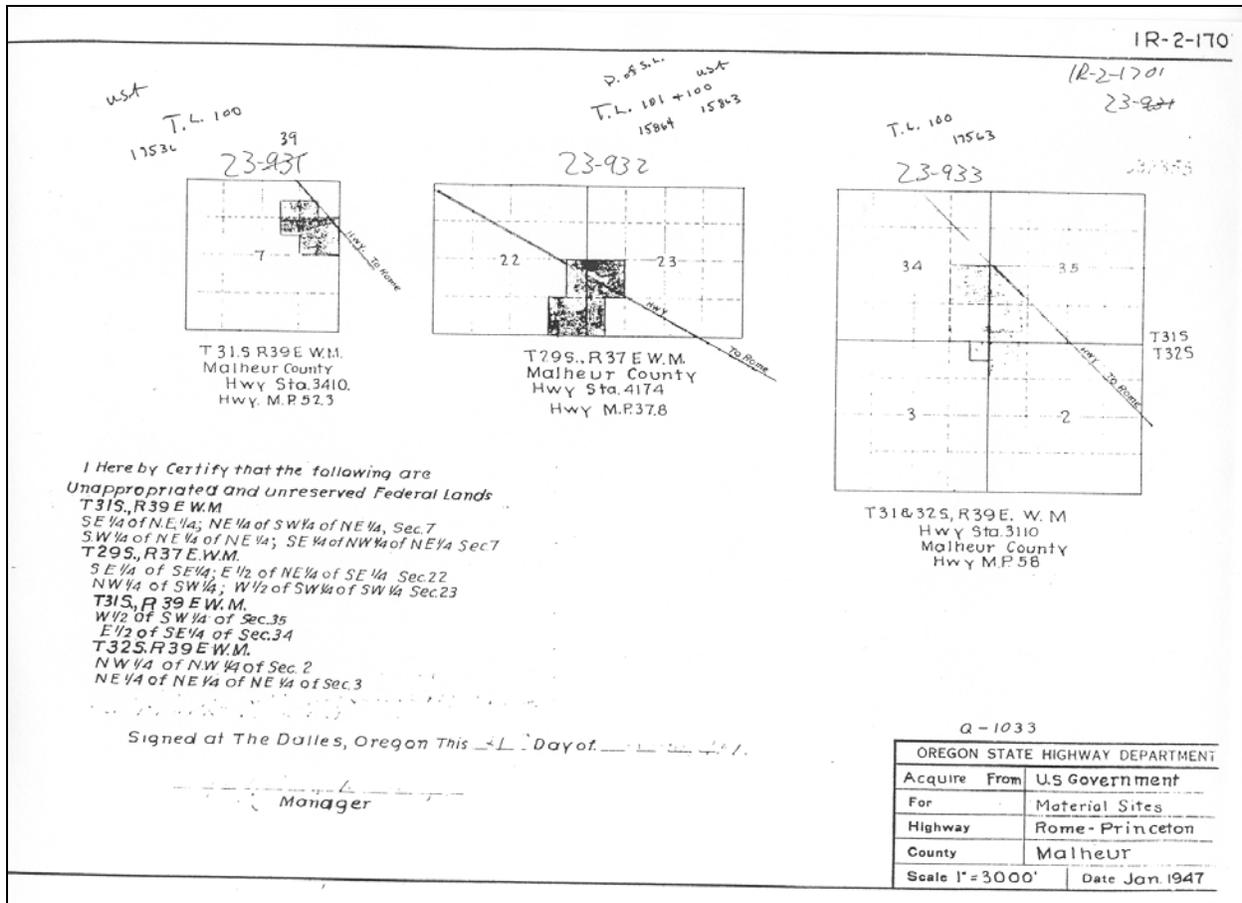
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur					14	0442	0	31S	39.0E	07
File ID		Source #	Date Visited	Map #		Type of Site				
13492		23-039-5	07/31/2001	1R-2-1701		Raw Land				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42 52'59.25000"	117 57'59.20000"	1280	70	NA						
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			NA	120	300,000	450,000				
Potentially Significant Site	Why			Open/Closed	Direction					
No	USA Ground			Closed	NA					
Adjacent Land Use										
Open Space										
Remarks										
This site is west of and adjacent to Highway 78. There is no prior disturbance at this location. The material is composed of volcanic gravel (60%) and sand/ silt (40%). The terrain is gradual with a small knoll near a stock pile location.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



View of the raw land site west of Highway 78.



Close-up view of the material at this location.



Aerial view of the site located west of Highway 78.

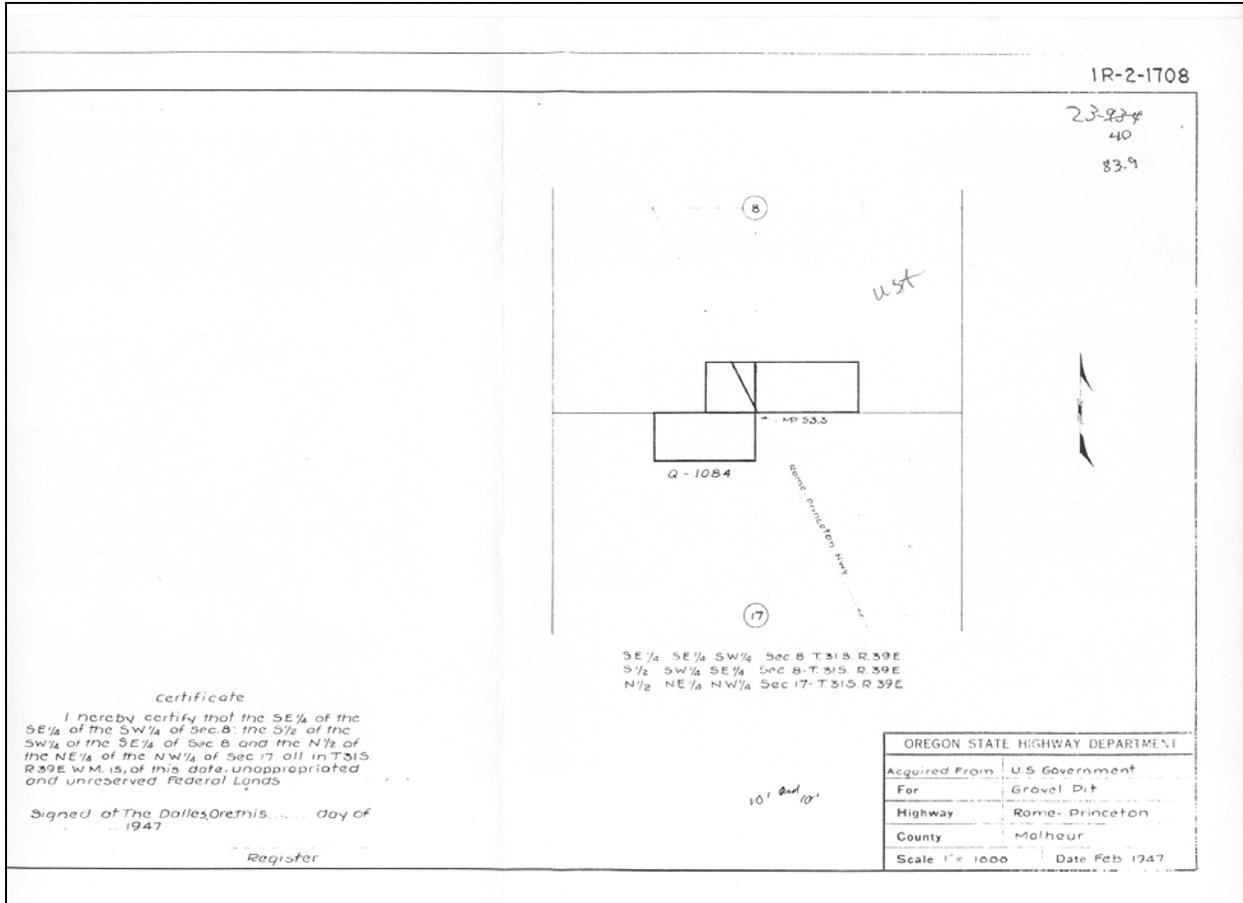
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur					14	0442	83.3	31S	39.0E	08
File ID		Source #	Date Visited	Map #			Type of Site			
13525		23-040-5	07/31/2001	1R-2-1708			Borrow			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42 52'18.78024"	117 57'07.26185"	1264.388	50	<3						
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color		Weathering			Jointing			
Volcanic Colluvium	Qf	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair			NA	120	200,000	300,000				
Potentially Significant Site	Why			Open/Closed	Direction					
No	USA Ground			Closed	NA					
Adjacent Land Use										
Open Space										
Remarks										
Highway 78 bisects this ground. The material is composed of volcanic gravel, small boulder and less (70%) and sand/silt (30%). The terrain is flat with room to work and no screening.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



View of the borrow site bisected by Highway 78.



Close-up view of the aggregate at this location.



Aerial view of the borrow site located on either side of Highway 78.

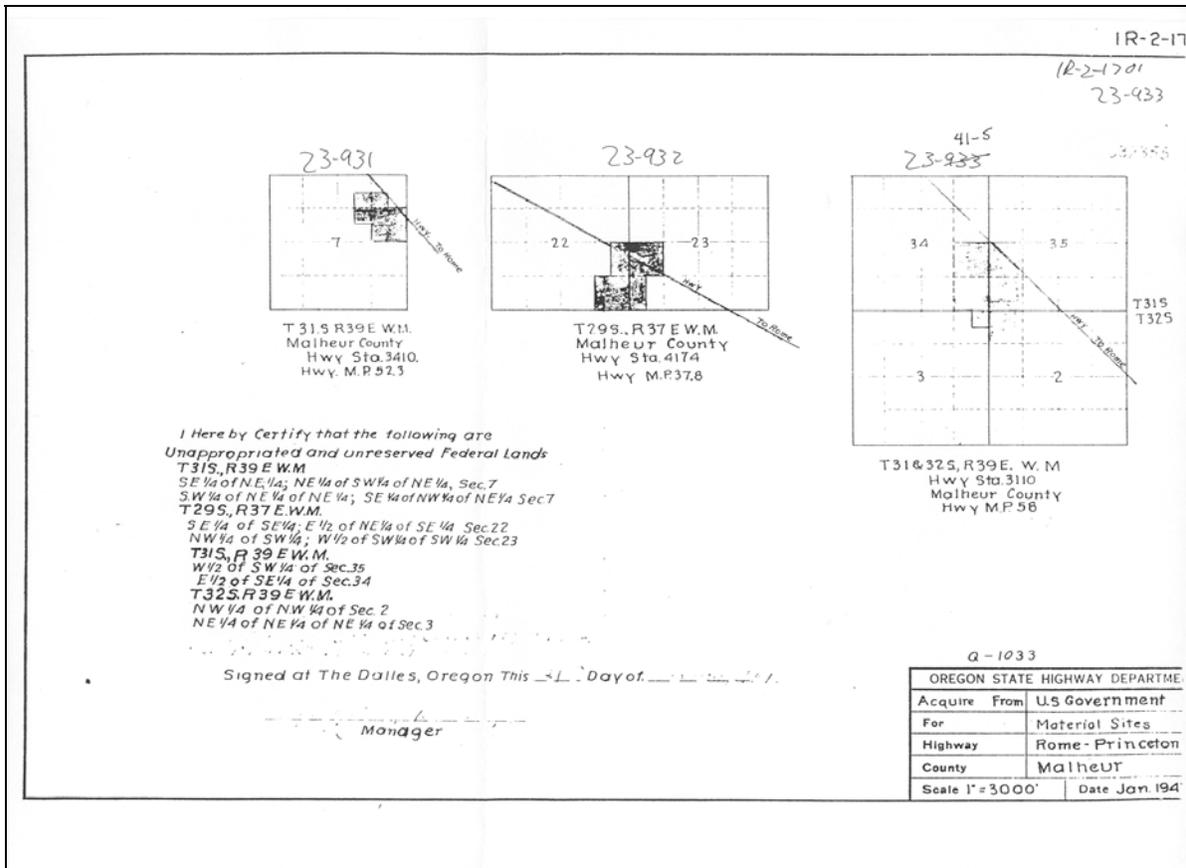
County	Site Name	Dist	Hwy	Mile Pt	TWP	RGE	Sect	
Malheur		14	0442	37.90	31S, 32S	39.0E	(34, 35) (02, 03)	
File ID		Source #	Date Visited		Map #		Type of Site	
13492		23-041-5	07/31/2001		1R-2-1701		Borrow	
Latitude		Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #		
42 48'53.66699"		117 53'53.80341"	1242.413	210	<58			
Comments								
GPS acquired in the pit.								
Rock Type		Unit	Color	Weathering		Jointing		
Volcanic Colluvium		Qt	NA	NA		NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)		
Fair			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 located west of and adjacent to Highway 78. The material at this location is composed of angular volcanic colluvium (80%) cobble size and less, and sand/silt (20%). The terrain is flat with ample room to work and no screening from the highway. The site has multiple pits with variable volcanic lithology. The quantity represents a small amount of the total.								
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.
Material Use								



View of the 210 acre site located west of Highway 78.



Close-up view of the aggregate at this location.



Aerial view of the large borrow site located to the west of Highway 78.

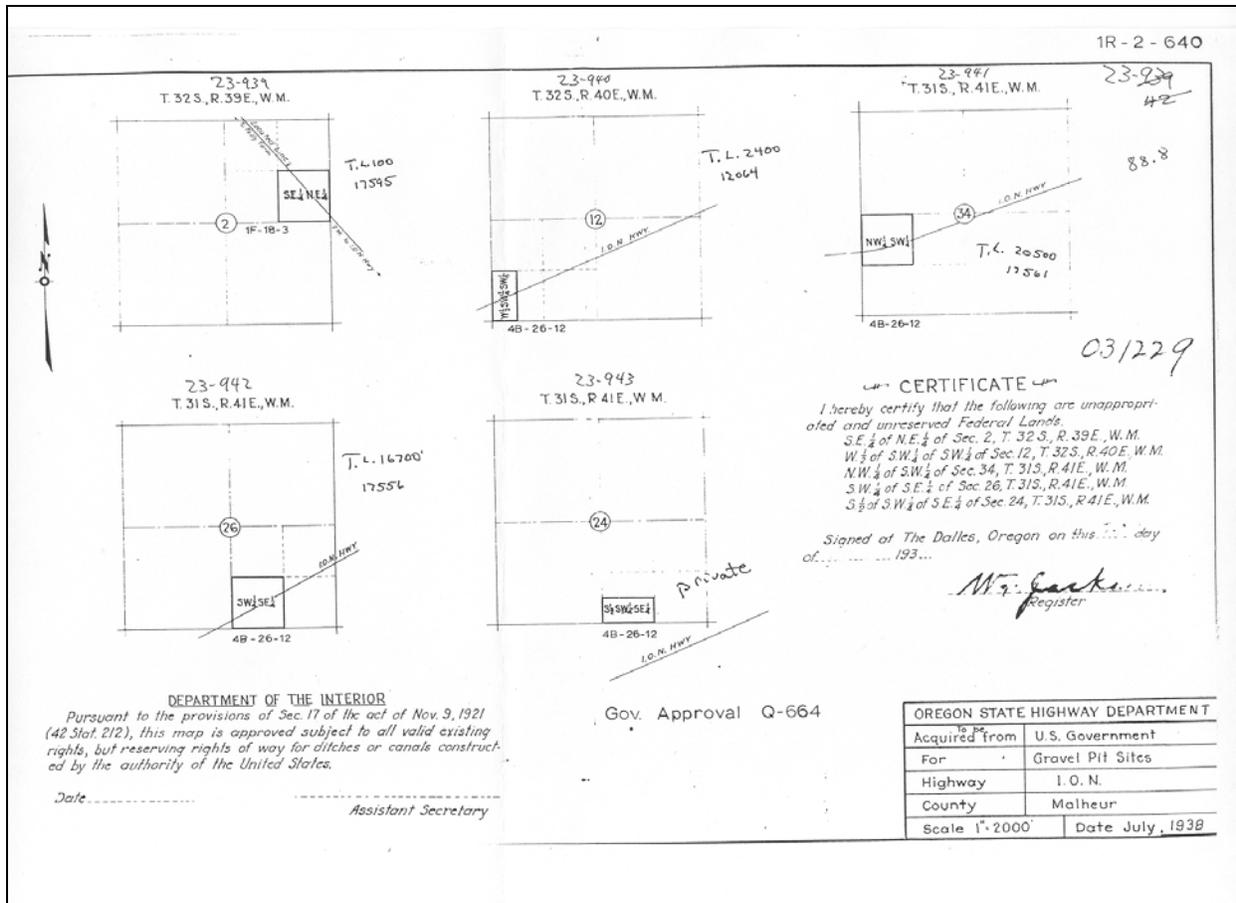
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur					14	0456	88.80	32S	39.0E	02
File ID		Source #	Date Visited	Map #			Type of Site			
Q0664		23-042-5	07/31/2001	1R-2-640			Raw Land			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42 48'24.63000"	117 53'06.76000"	1231	40	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color	Weathering			Jointing				
Volcanic Colluvium	Qt	NA	NA			NA				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Poor to Fair			NA	120	320,000	518,400				
Potentially Significant Site	Why			Open/Closed	Direction					
No	USA Ground			Closed	NA					
Adjacent Land Use										
Open Space										
Remarks										
Highway 78 bisects this ground north of Burns Junction. The material is composed of volcanic colluvium with about 40% gravel and 60% sand/silt. Unknown depth to bed rock. The terrain is flat with ample room to work and no screening from the highway.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



View of the raw land site bisected by Highway 78 north of Burns Junction.



Close-up view of the material at the site.



Aerial view of Highway 78 and the raw land site.

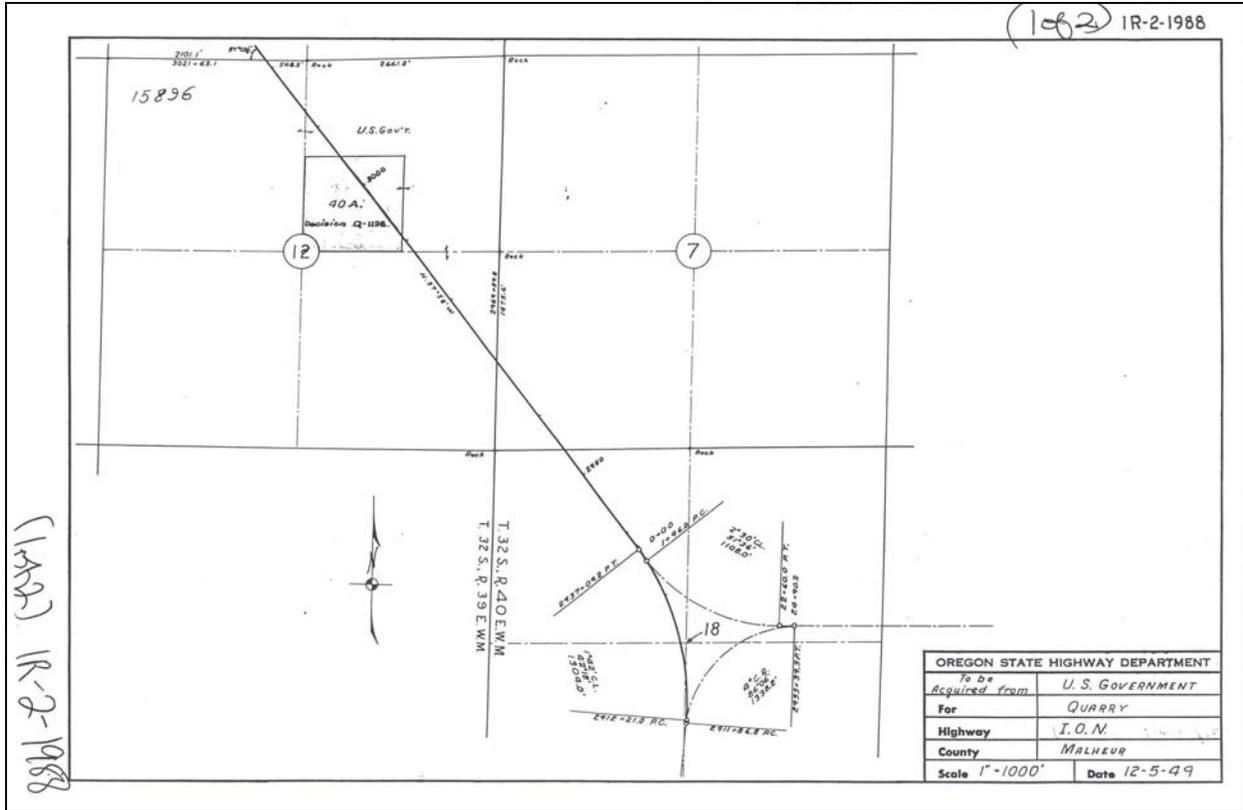
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur				14	0442	90	32S	39.0E	12
File ID		Source #	Date Visited	Map #			Type of Site		
15897		23-043-5	07/31/2001	1R-2-1988			Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
42 47'34.74445"	117 52'21.88395"	1237.409	40	<1					
Comments									
GPS acquired in the pit.									
Rock Type	Unit	Color		Weathering			Jointing		
Basalt	Tba	Olive Grey		Slight			Highly Fractured to Massive		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Fair			R3-	158	565,000	1,205,145			
Potentially Significant Site	Why			Open/Closed	Direction				
No	USA Ground			Closed	NA				
Adjacent Land Use									
Open Space									
Remarks									
Highway 78 bisects this ground just north of Burns Junction. The rock is a fine-grain, highly fractured, platy basalt. You can acquire minor rip rap at this location. The terrain is gradual with limited screening, and room to work. The quarry site occupies a small hill. BLM ground.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
2.464	2.462	17.9	3.0	2.0	7.9	1.2	7.7	1.5	
Material Use									
Quarry Rock (1997)									



View of the quarry site located north of Burns Junction.



Close-up of the quarry face, note the fracture pattern.



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

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur					14	0450	10.6	21S	46.0E	11
File ID		Source #	Date Visited	Map #		Type of Site				
08506		23-046-5	06/26/2001	1R-2-1054		Borrow				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
43 45'49.92179"	117 03'54.13461"	668.964	4	<3						
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color	Weathering		Jointing					
Volcanic Gravel	QTg	NA	NA		NA					
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good			NA	120						
Potentially Significant Site	Why			Open/Closed	Direction					
No	Too Small			Closed	NA					
Adjacent Land Use										
Farming										
Remarks										
This site is adjacent to and east of Highway 201. The material here is cobble size and less gravel (60%) and sand (40%). There is limited room to work with no screening. The bottom of the pit is about 8 to 10 feet below the highway. There was water in multiple spots on the site. This ground may have wetland potential.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

W

SE



View of the borrow site adjacent to and east of Highway 201.



Close-up view of the aggregate at the borrow site.

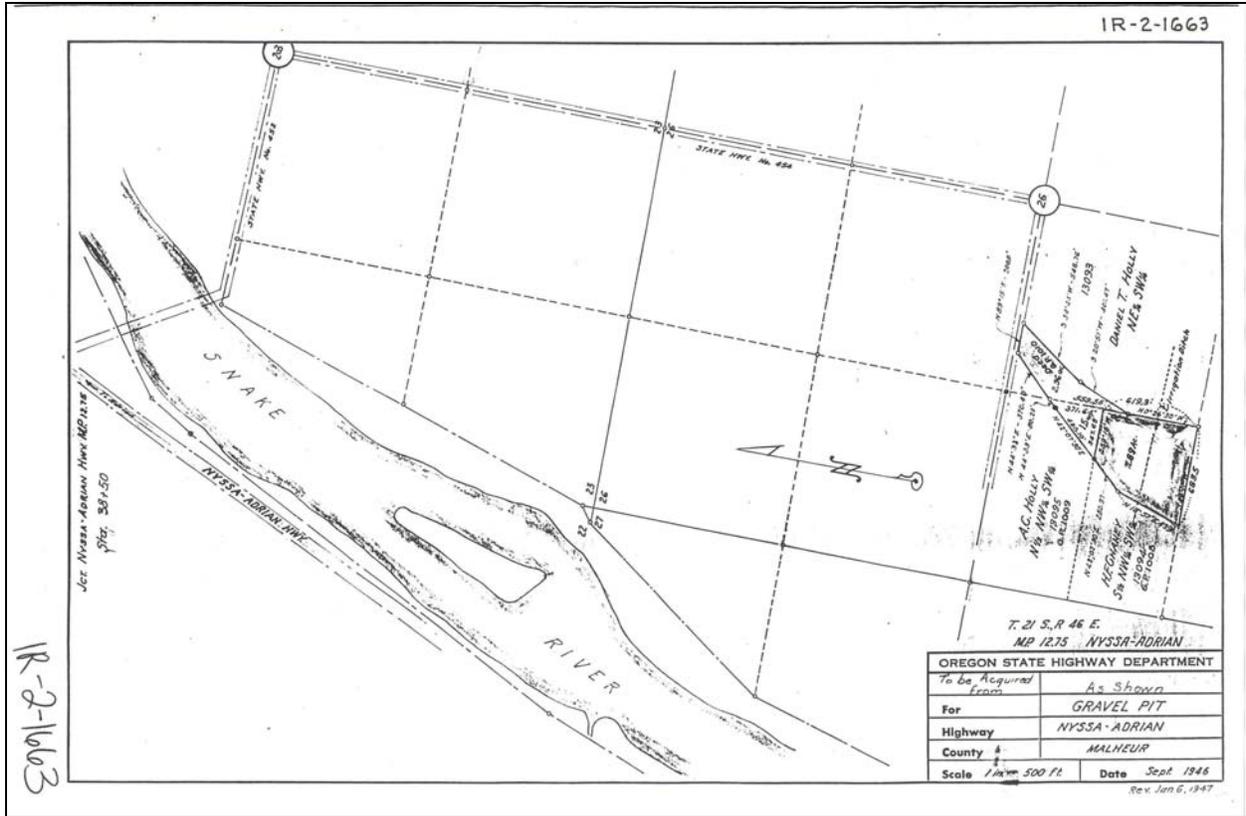
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur				14	0454	1.43	21S	46.0E	26
File ID		Source #	Date Visited	Map #		Type of Site			
13093, 13094, 13095		23-047-5	06/26/2001	1R-2-1663		Borrow			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #				
43 42'48.73241"	117 04'16.41155"	682.832	12.35	<7					
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			NA	120	5,000	7,500			
Potentially Significant Site	Why	Open/Closed	Direction						
No	NA	Closed	West approximately 0.75 miles is the Snake River						
Adjacent Land Use									
Farming									
Remarks									
This site is located in Idaho. This site was a borrow pit, but is used as a waste site for anyone. There is no gate, sign or fencing to restrict access. The material here is small cobble size and less gravel (50%) and sand (50%) The site occupies a topographic high above the surrounding area and could be lowered to acquire more aggregate. There is room to work with good screening.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									



View of the borrow site located in Idaho.



Close-up view of the aggregate at the site.



Aerial view of the borrow site located near the Snake River.

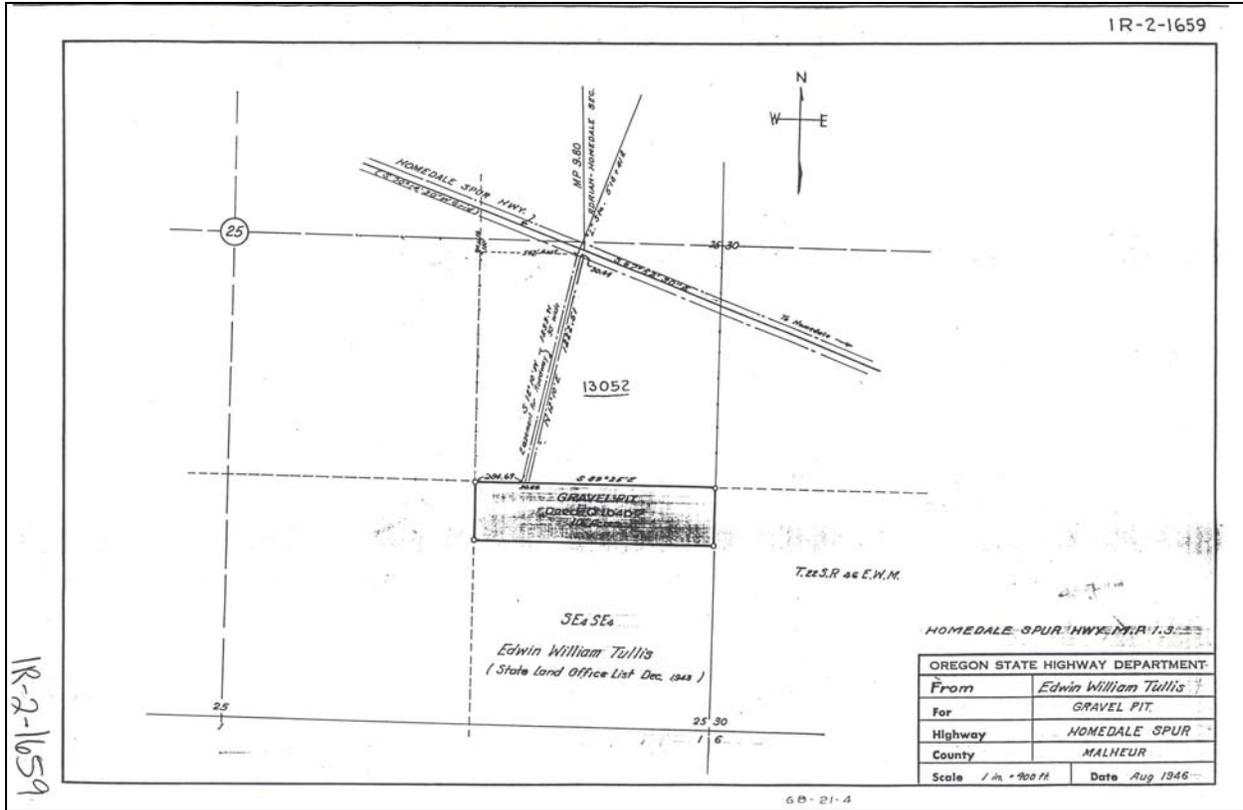
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur					14	0455	21.61	22S	46.0E	25
File ID		Source #	Date Visited	Map #		Type of Site				
13052		23-050-5	06/26/2001	1R-2-1659		Borrow				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
43 37'30.92947"	117 02'14.02100"	773.527	10	<1						
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color		Weathering			Jointing			
Volcanic Gravel	QTg	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Poor to Fair			NA	120						
Potentially Significant Site	Why			Open/Closed	Direction					
No	Too Small			Closed	NA					
Adjacent Land Use										
Farming										
Remarks										
This site is south of Highway 201 about 400 meters. The material is composed of cobble size and less gravel (35%) and silt/sand (65%). There is a high portion of silt here and the volcanics are a poor quality aggregate. There is room to work with good screening. The terrain is very gradual. There is no sign, and the easement is not the access point. The entrance is off of Napton County Road.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



View of the borrow site located south of Highway 201.



Close-up view of the aggregate material at the site.



Aerial view of the borrow site near Highway 201.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur	Hope Gravel Pit			14	0451	2.2	18S	44.0E	31
File ID		Source #	Date Visited	Map #			Type of Site		
12766, 12767, 32520		23-051-5	06/13/2001	1R-2-1615, 1R-5-1454			Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
43 58'06.77439"	117 22'43.56085"	774.072	24.94	<19		23-0130			
Comments									
GPS acquired at the access point.									
Rock Type	Unit	Color		Weathering			Jointing		
Volcanic Gravel	QTg	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Good			NA	120	100,000	150,000			
Potentially Significant Site	Why			Open/Closed	Direction				
Yes	Large acreage, close to Highway 20.			Closed	Adjacent to the west is a dry creek.				
Adjacent Land Use									
Farming									
Remarks									
This site is north of Highway 20 about 2 miles off of Graham Blvd and Whitney Road. The material at this site is composed of cobble size and less volcanic gravel (60%) and sand/silt (40%). There is ample room to work on this fairly flat terrain, with fair screening. The site is used as a stock pile, waste rock and grindings site. The waste material should be laid down in an area that will never be touched again, not spread throughout the property.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
2.48	2.58		0.4	1.5					
Material Use									
AC (1989)									

SE

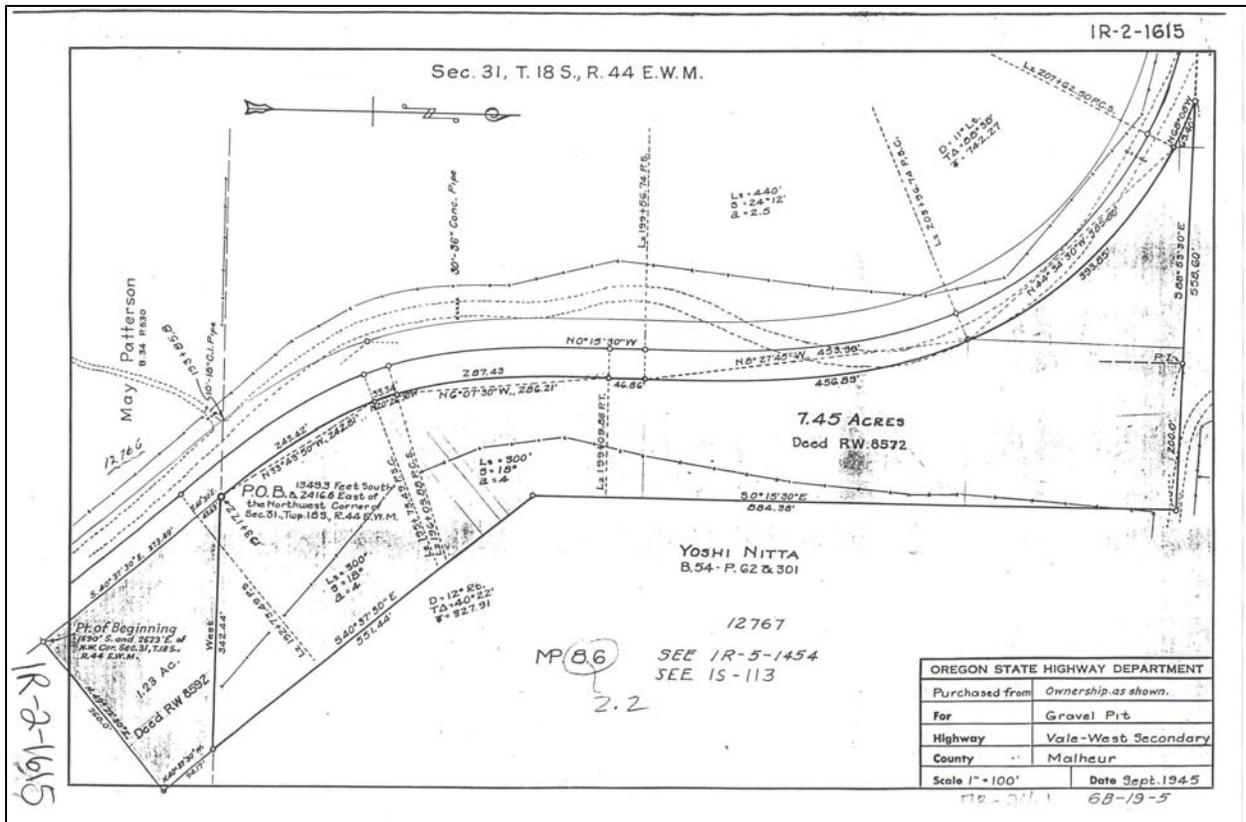
NE



View of the quarry site, note the stock piles, waste rock and grindings stored at the site.



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



DOGAMI image of the quarry site located north of Highway 20 about 2 miles.

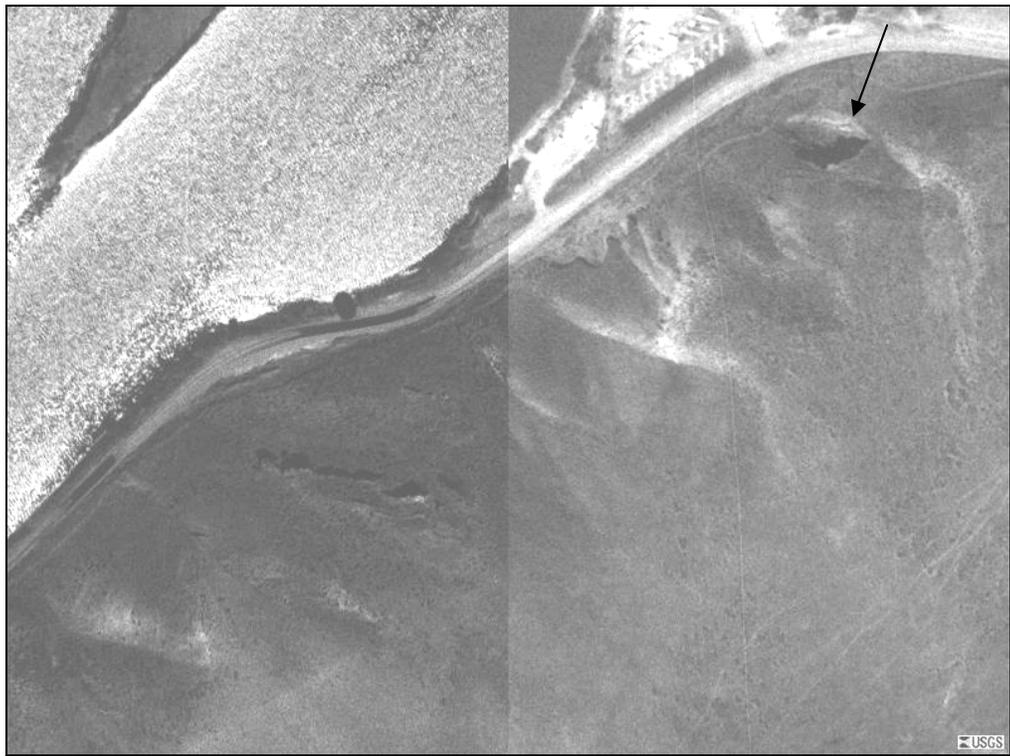
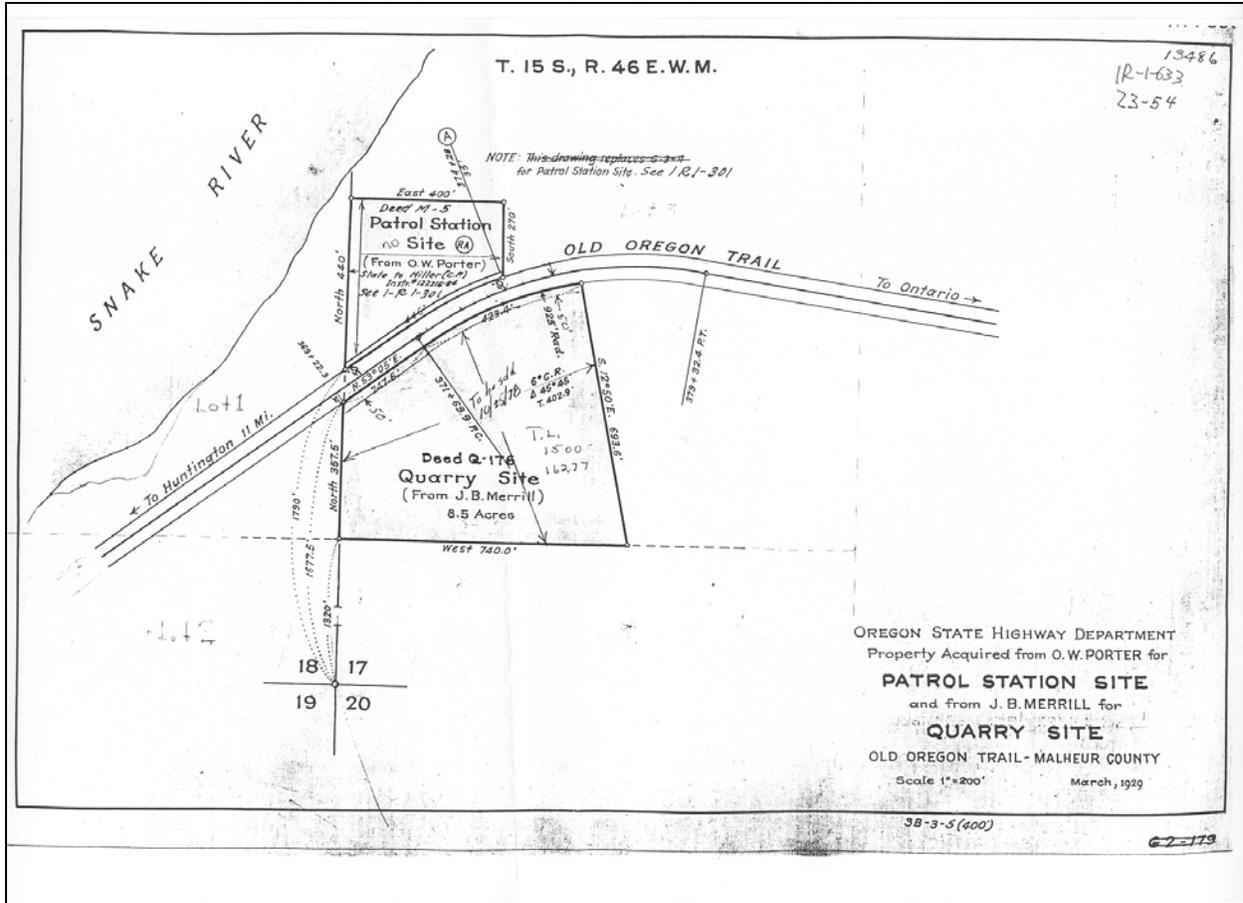
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur				14	0455	3.2	15S	46.0E	17
File ID		Source #	Date Visited	Map #			Type of Site		
Q0176		23-054-5	06/07/2001	1R-1-633			Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
44 15'46.57000"	117 07'30.90000"	670	8.5	<1					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color	Weathering			Jointing			
Volcanic	Ts/ Tob	NA	Decomposing to Moderate			Massive			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Fair to Poor			R2	164					
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			Closed	Snake River is 200 meters to the north				
Adjacent Land Use									
Open Space/ Farming/ RV Park									
Remarks									
This site is located south of and adjacent to Highway 201. The material here is a medium-grain, decomposing, volcanic rock. There is limited room to work with no screening from the highway. The terrain is steep. There are power lines that would need to be moved if we wish to utilize this ground. There is a private RV park across the highway from this site. All work should proceed from the top down. You will need to drill and blast. Surplus?									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

SE

W



View looking across Highway 201 at the quarry site.

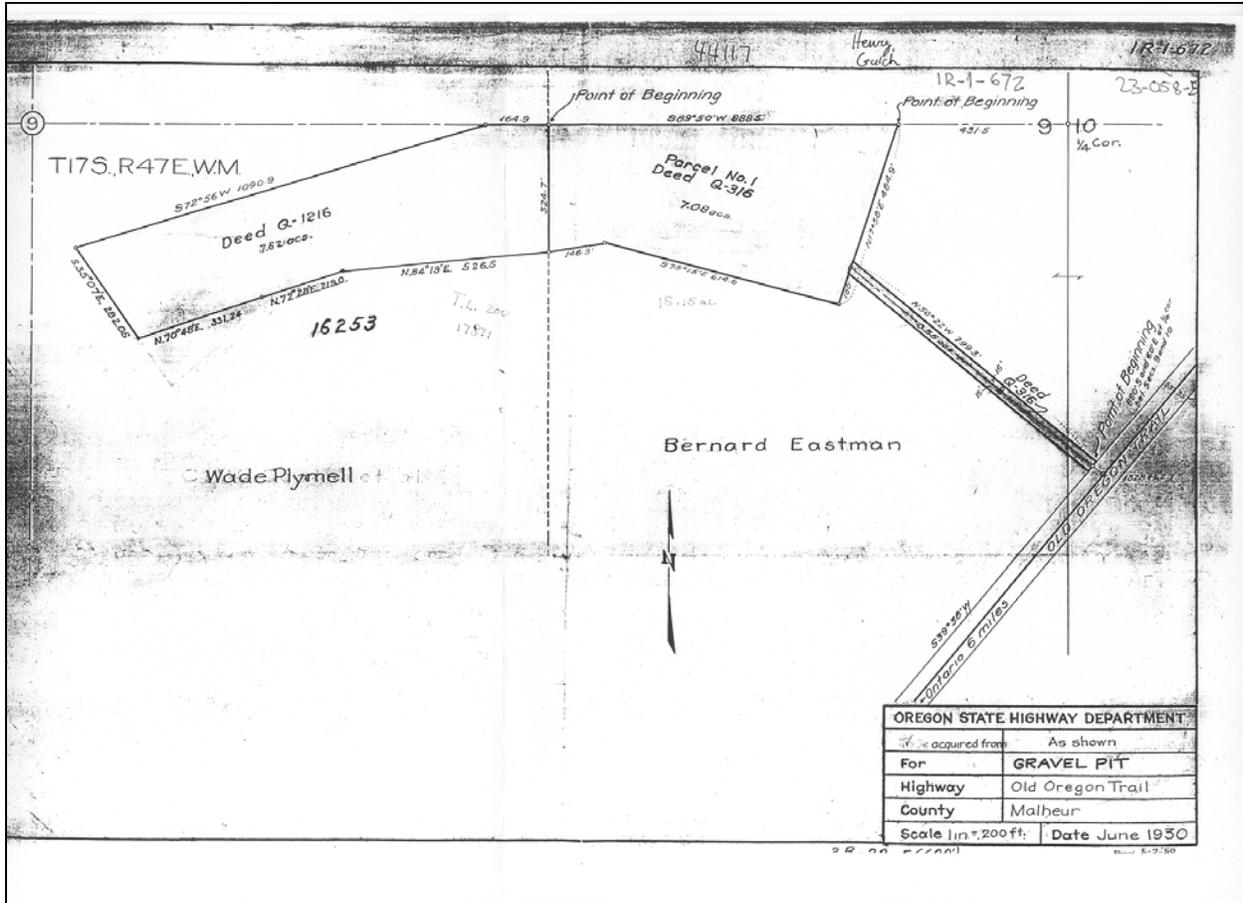


Aerial view of the quarry site directly adjacent to Highway 201 and the Snake River.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur				14	0455	21.2	17S	47.0E	09
File ID		Source #	Date Visited	Map #			Type of Site		
16253, Q0316		23-058-5	06/07/2001	1R-1-672			Raw Land		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
44 06'12.76000"	116 58'01.52000"	666	14.6	NA					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
Gravel	QTg	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
NA			NA	120					
Potentially Significant Site	Why			Open/Closed	Direction				
No	NA			NA	Irrigation ditch adjacent				
Adjacent Land Use									
Rural Residential									
Remarks									
This site is located west of Highway 201 about 300 meters. There is no access to the ground. The property is located in an area of good gravel. We would need to develop the access and the site if we wish to utilize the ground.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									



View of the raw land site located west of Highway 201.



Aerial view of the raw land site with no access.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur				14	0456	2.2	27S	46.0E	02, 11
File ID		Source #	Date Visited		Map #			Type of Site	
23982		23-061-5	06/26/2001		1R-5-790			Quarry	
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #				
43 14'02.64947"	117 03'26.09523"	1253.07	14.8	<1					
Comments									
GPS acquired in the pit.									
Rock Type	Unit	Color		Weathering			Jointing		
Basalt	Tb	Light Olive Grey (5Y 5/2)		Moderate			Highly Fractured		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Fair			R2+	156	20,000	30,000			
Potentially Significant Site	Why			Open/Closed	Direction				
No	Too Small			Closed	Adjacent to the west is Sucker Creek				
Adjacent Land Use									
Open Space									
Remarks									
This site is located north of Highway 95 about 0.5 miles. The rock here is a fine-grain, moderately weathered, vesicular basalt. There is moderate secondary calcite alteration. The upper portions of the exposure are weathered with the lower reaches very fresh and dense. There is limited room to work with and no screening. You can rip the upper portion but will have to drill and blast the better basalt. The terrain is moderate to steep and could pose a problem with the location of the creek.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

NW

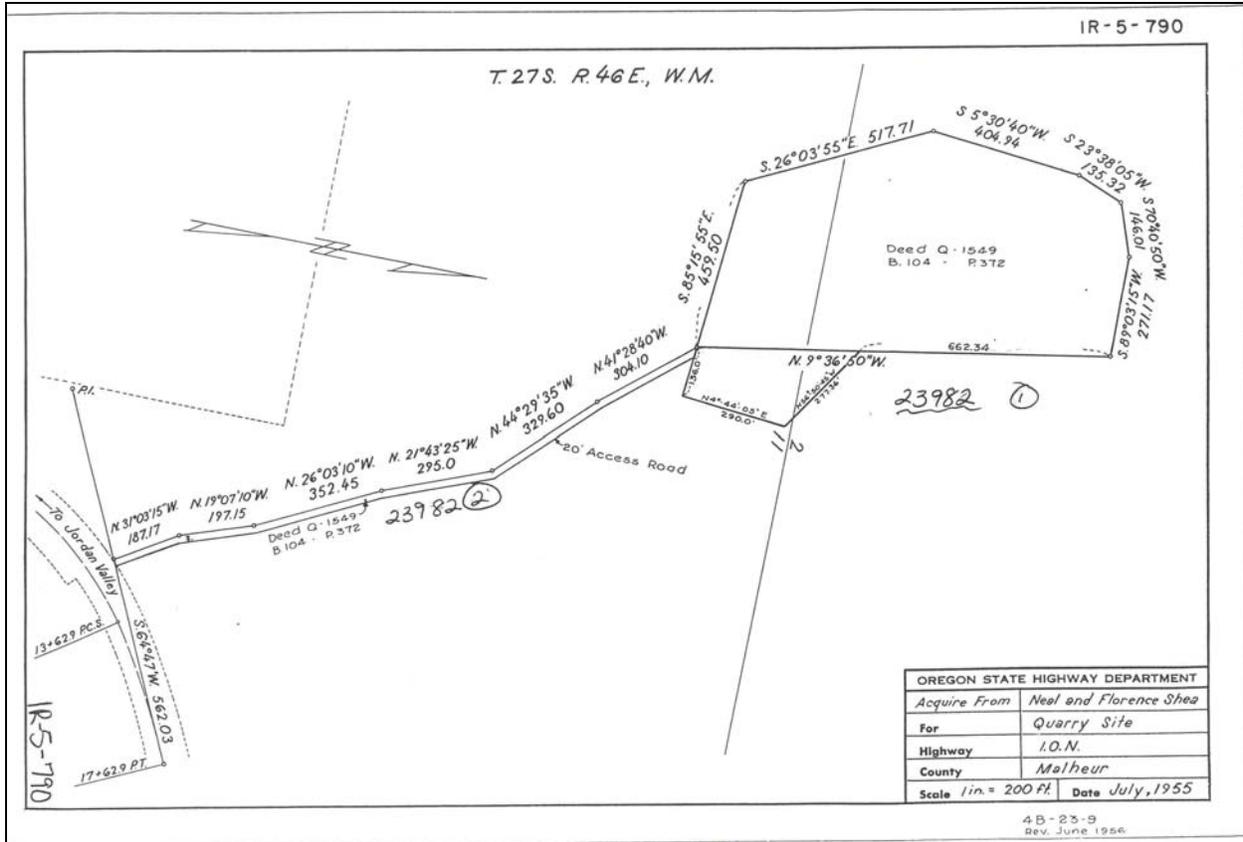
S



View of the quarry site located north of Highway 95.



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



Aerial view of the quarry site.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur	Thomas Creek				14	0456	9.6	28S	46.0E	12, 10
File ID		Source #	Date Visited	Map #		Type of Site				
11282, 11292		23-063-5	06/26/2001	1R-2-1440, 1R-2-1442		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
43 08'23.14000"	117 04'30.99000"	1456	50	<1						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering		Jointing				
Basalt	Tvm	Medium Dark Grey (N4)		Slight to Fresh		Highly Fractured				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good			R3	169	5,000	7,500				
Potentially Significant Site	Why			Open/Closed	Direction					
No	USA Ground			Closed	Adjacent to Thomas Creek to the west					
Adjacent Land Use										
Open Space/ Ranching/ Farming										
Remarks										
This site is west of Highway 95 approximately 2 miles. The rock here is a fine-grain, highly fractured basalt. You can rip the material. There is room to work with good screening. The terrain is gradual, around 10 to 15 degrees. The basalt is in contact with water lain tuffs and is probably thin in this area. It forms the ridge along the east side of the creek. There is also a stock pile site associated with the quarry, it is located two miles east of the quarry adjacent to the highway.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

NW

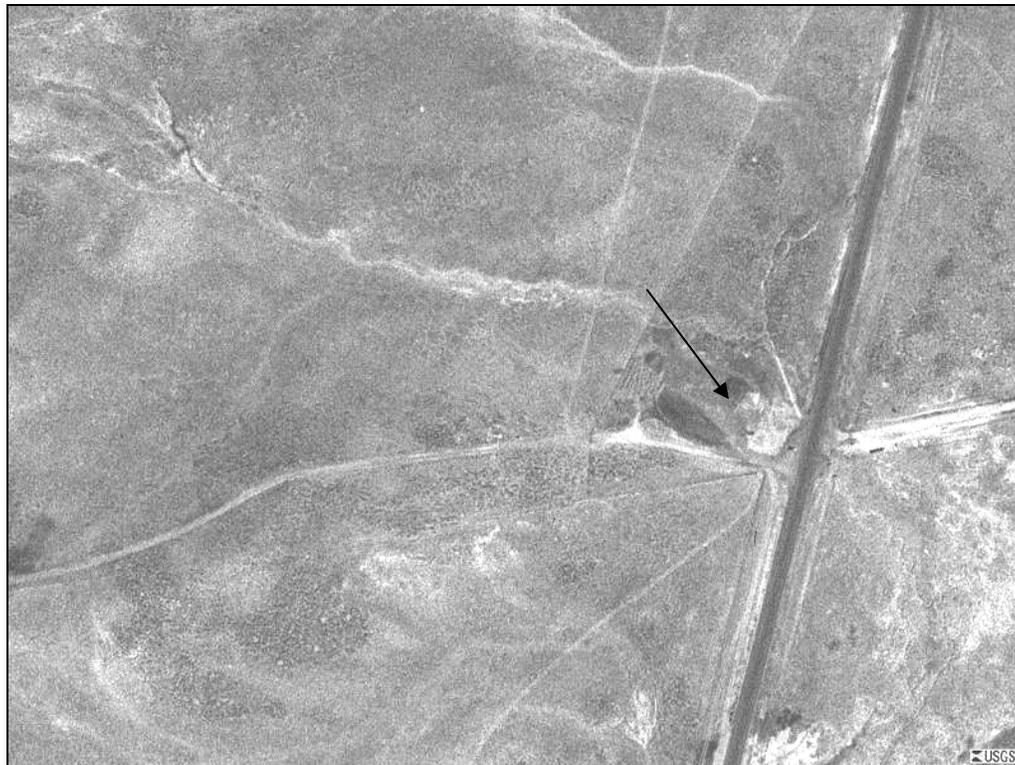
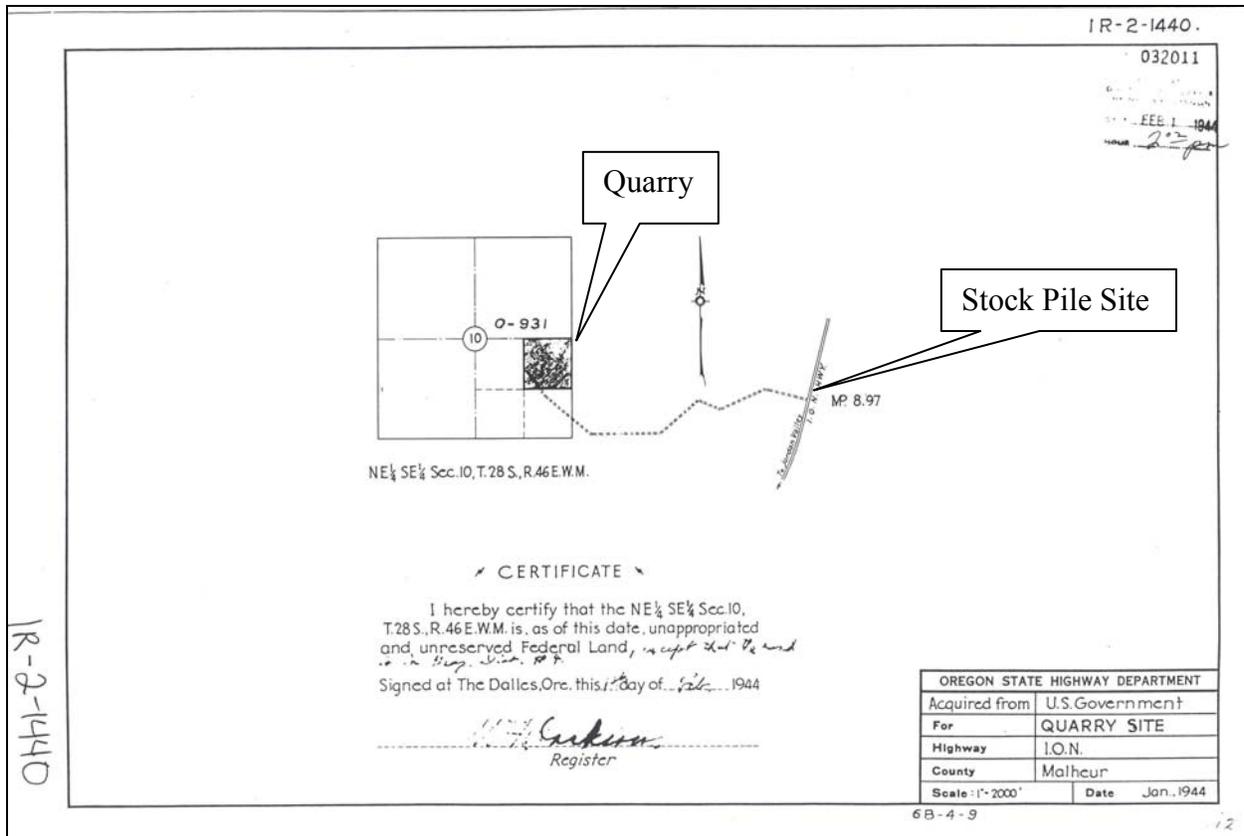
S



View of the quarry site located two miles west of Highway 95.



Close-up view of the quarry wall.



Aerial view of the stock pile site with Highway 95 bisecting the ground. The quarry is located to the west, approximately two miles.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur					14	0456	10.1	28S	46.0E	13
File ID		Source #	Date Visited	Map #			Type of Site			
41084		23-064-5	06/27/2001	1R-4-271			Quarry			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
43 07'21.54150"	117 02'08.20624"	1486.366	96	<4	23-0005					
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color		Weathering			Jointing			
Basalt	Tb	Medium Dark Grey (N4)		Fresh			Highly to Moderately Fractured			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Very Good			R3+	179	750,000	1,125,000				
Potentially Significant Site	Why			Open/Closed	Direction					
Yes	Large ground, Very good rocks			Closed	NA					
Adjacent Land Use										
Open Space										
Remarks										
This site is located east of Highway 95 approximately 1 mile. The rock is a fine-grain basalt. There is ample room to work with some screening. You can rip the aggregate. The terrain is moderate around 15 degrees. Care should be used as to not crush or acquire any elongated pieces. This is a very good site and development should be protected for future projects.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.32	2.4	24.3	7.4	4.9						
Material Use										
EAC (1994)										

NW

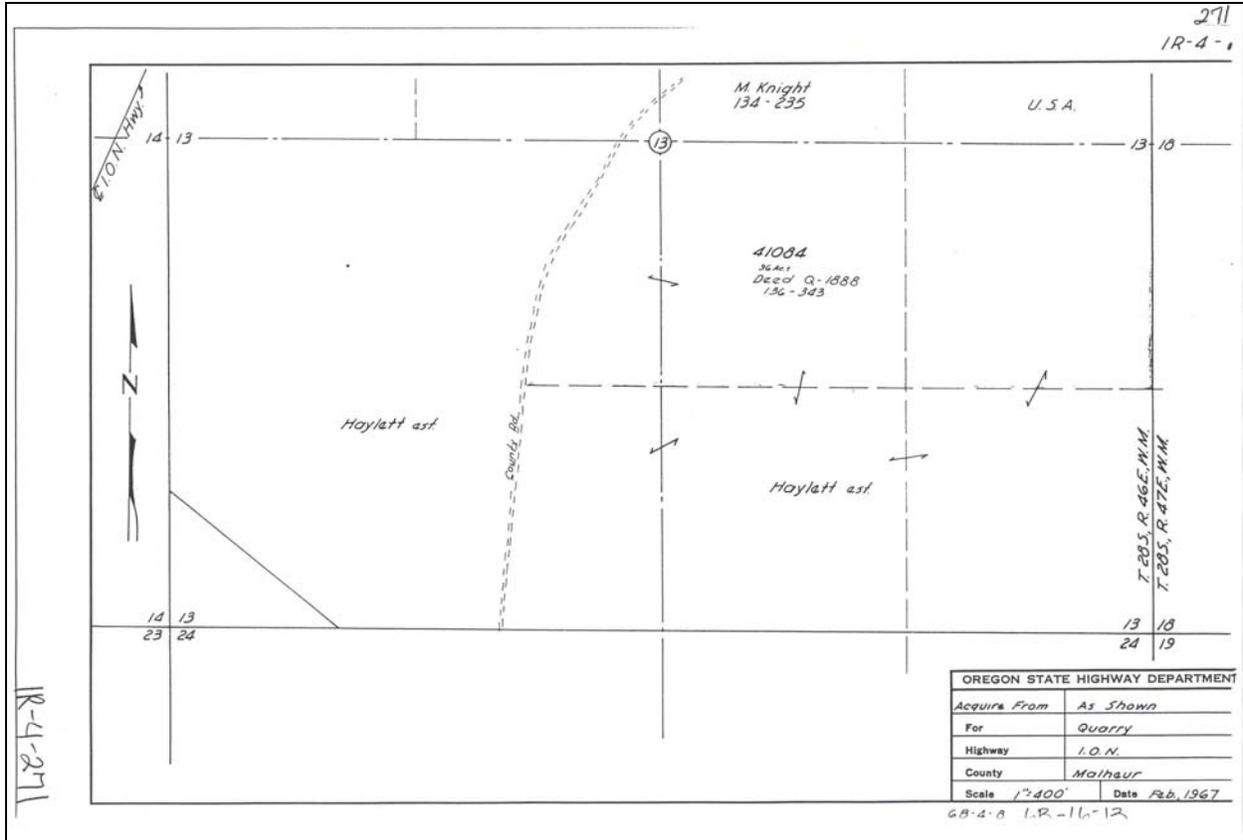
S



View of the quarry site located east of Highway 95 approximately one mile.



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

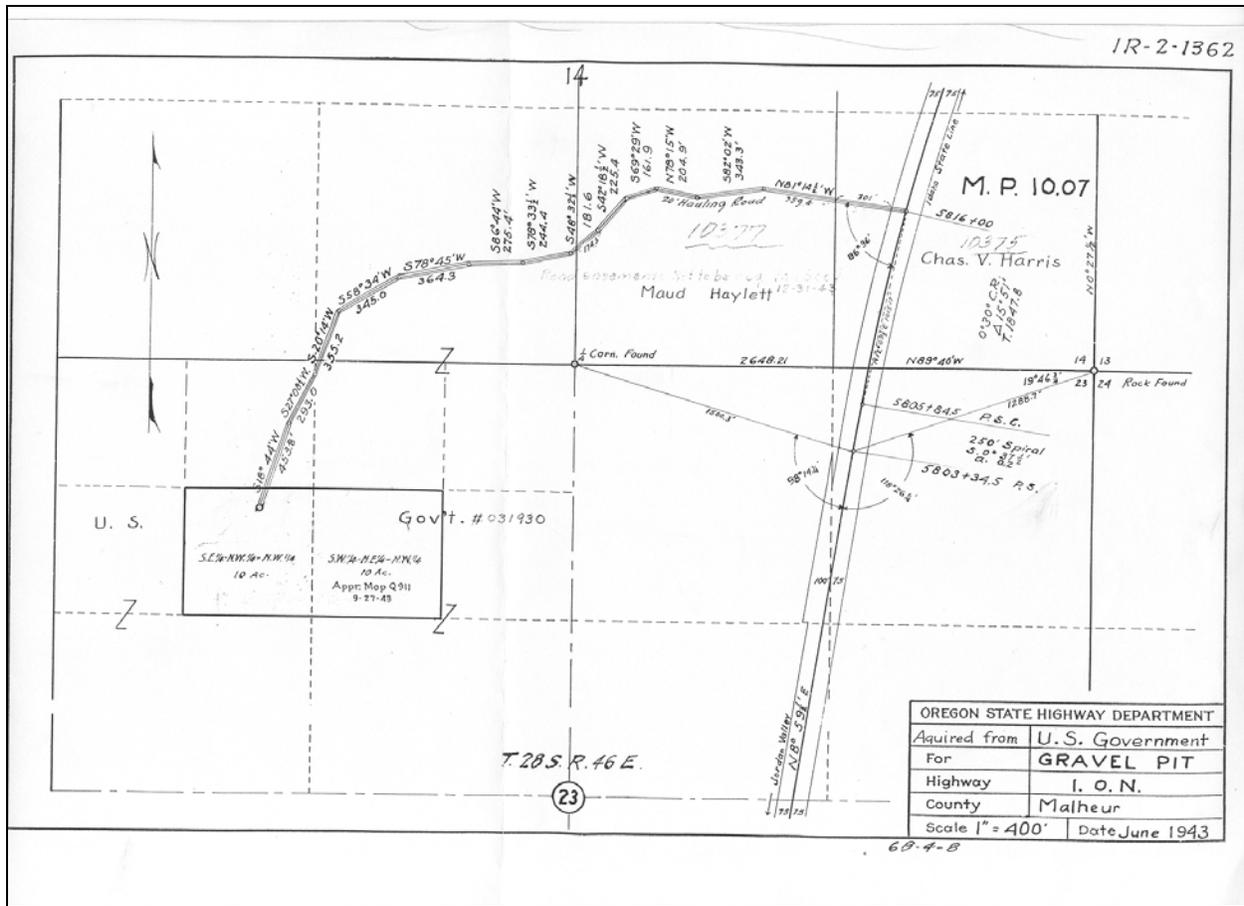


Aerial view of the quarry site, approximately one mile east of Highway 95.

County	Site Name		Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur			14	0456	10.10	28S	46.0E	23, 14
File ID		Source #	Date Visited		Map #		Type of Site	
NA		23-065-5	07/31/2001		1R-2-1362		Raw Land	
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #		
43 06'57.81000"	117 03'54.60000"	1462	20	NA				
Comments								
Lat. and Long. acquired using Terrain Navigator Software								
Rock Type	Unit	Color		Weathering		Jointing		
Unknown	Tts	NA		NA		NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)		
Unknown			NA	120	20,000	30,000		
Potentially Significant Site	Why			Open/Closed	Direction			
No	USA Ground			Closed	NA			
Adjacent Land Use								
Open Space								
Remarks								
This site is located west of Highway 95 approximately 700 meters. There is no access and I did not hike in to visit the site. The material near the highway was a sandstone (Ss) of poor quality. Access would need to be developed if we wish to use this ground in the future.								
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.
	2.87	14.9	6.9	3.3			19.0	0.7
Material Use								
Quarry Rock (1974)								



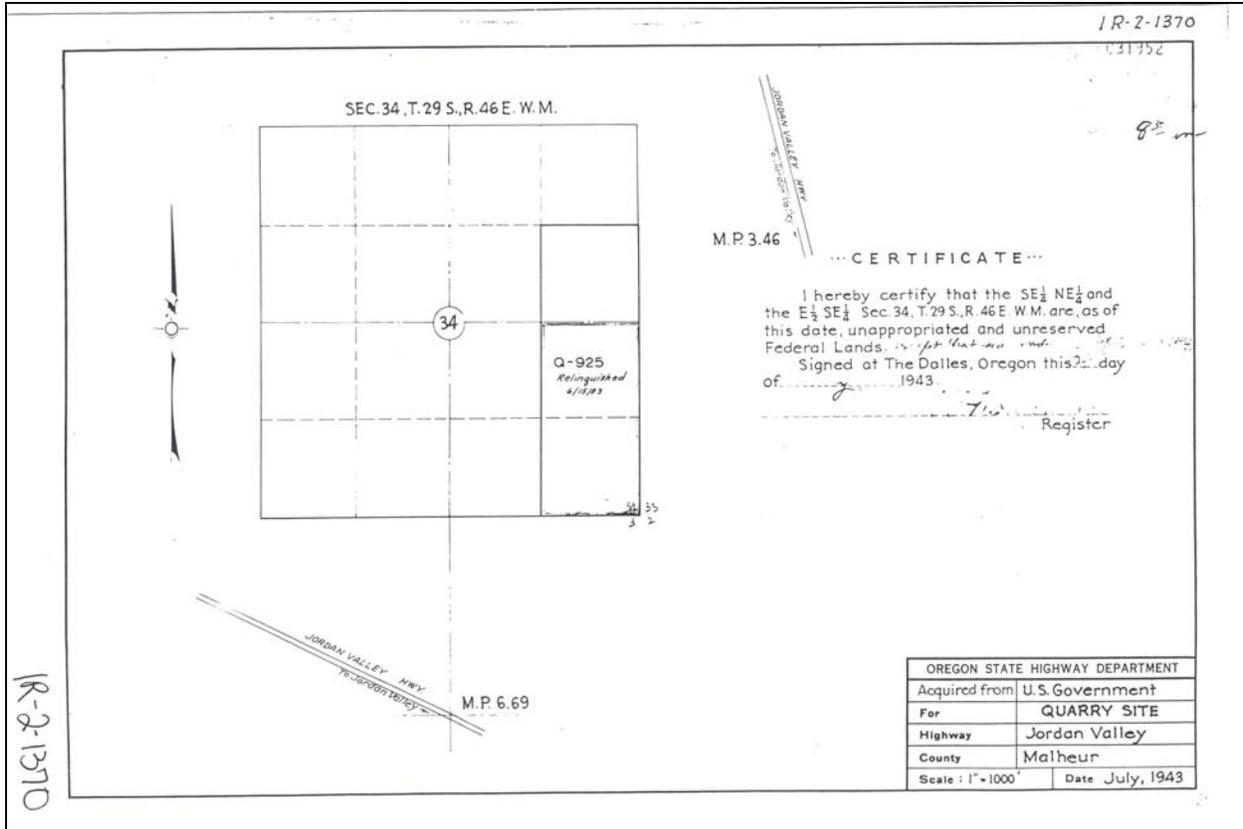
View of the raw land site along Highway 95.



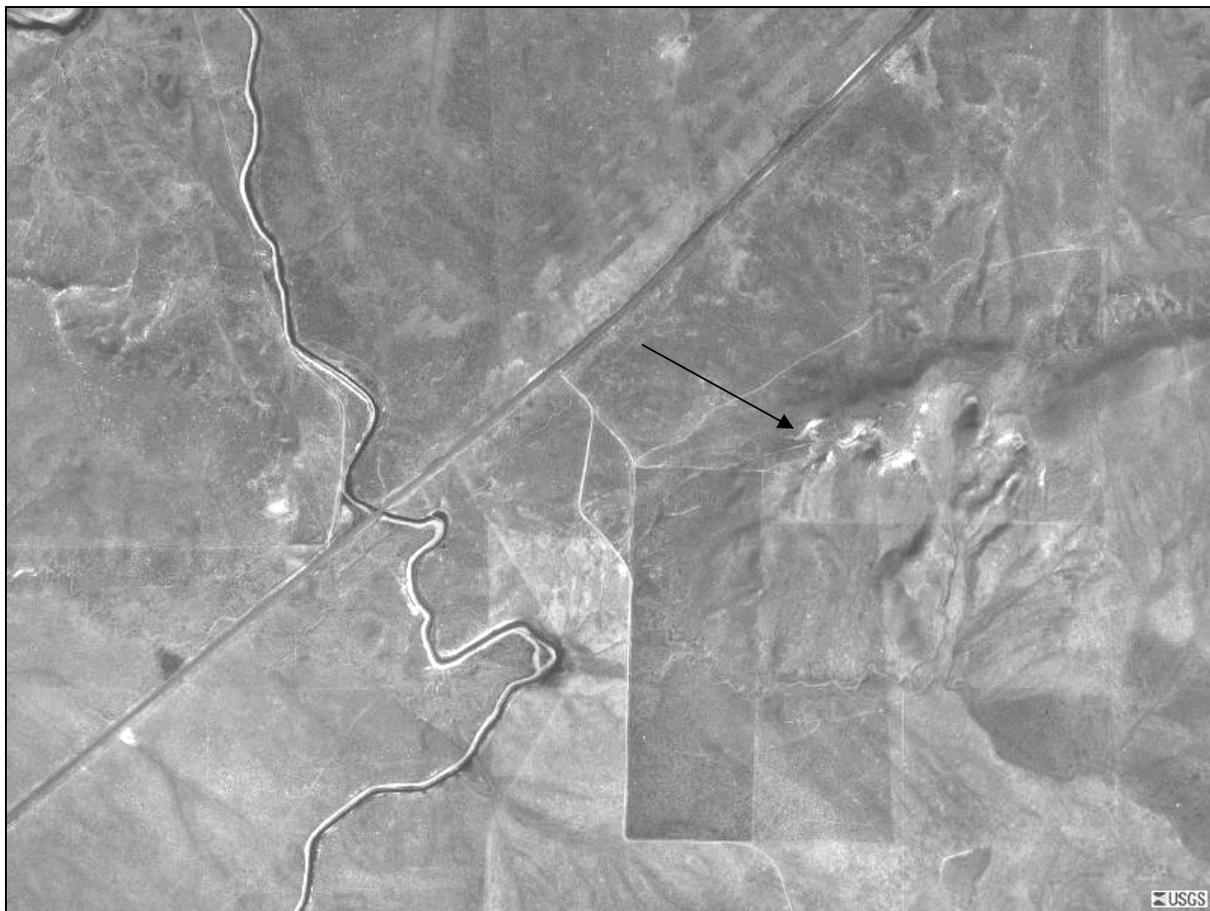
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur	Jordan Valley			14	0523	18.6	29S	46.0E	34
File ID		Source #	Date Visited	Map #			Type of Site		
10974		23-066-5	06/28/2001	1R-2-1370			Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
42 59'42.99529"	117 04'27.03687"	1364.291	120	<5		23-0138			
Comments									
GPS acquired at the base of the pit.									
Rock Type	Unit	Color		Weathering			Jointing		
Basalt	Tb	Medium Dark Grey (N4)		Fresh			Unknown		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Good			R3+	182	10,000	15,000			
Potentially Significant Site	Why			Open/Closed	Direction				
No	USA Ground			Closed	NA				
Adjacent Land Use									
Open Space									
Remarks									
This site is located west of Highway 95 about 0.5 miles. The rock here is a fine-grain basalt. This site has been reclaimed and there were no viable exposures to evaluate the rock. The terrain is gradual with limited screening and ample room to work. There could be up to 5 feet of overburden. You can rip the rock. The thickness of the basalt flow is unknown at this time. There is up to 40 acres available at this location. 200,000 cubic yards have been removed.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									



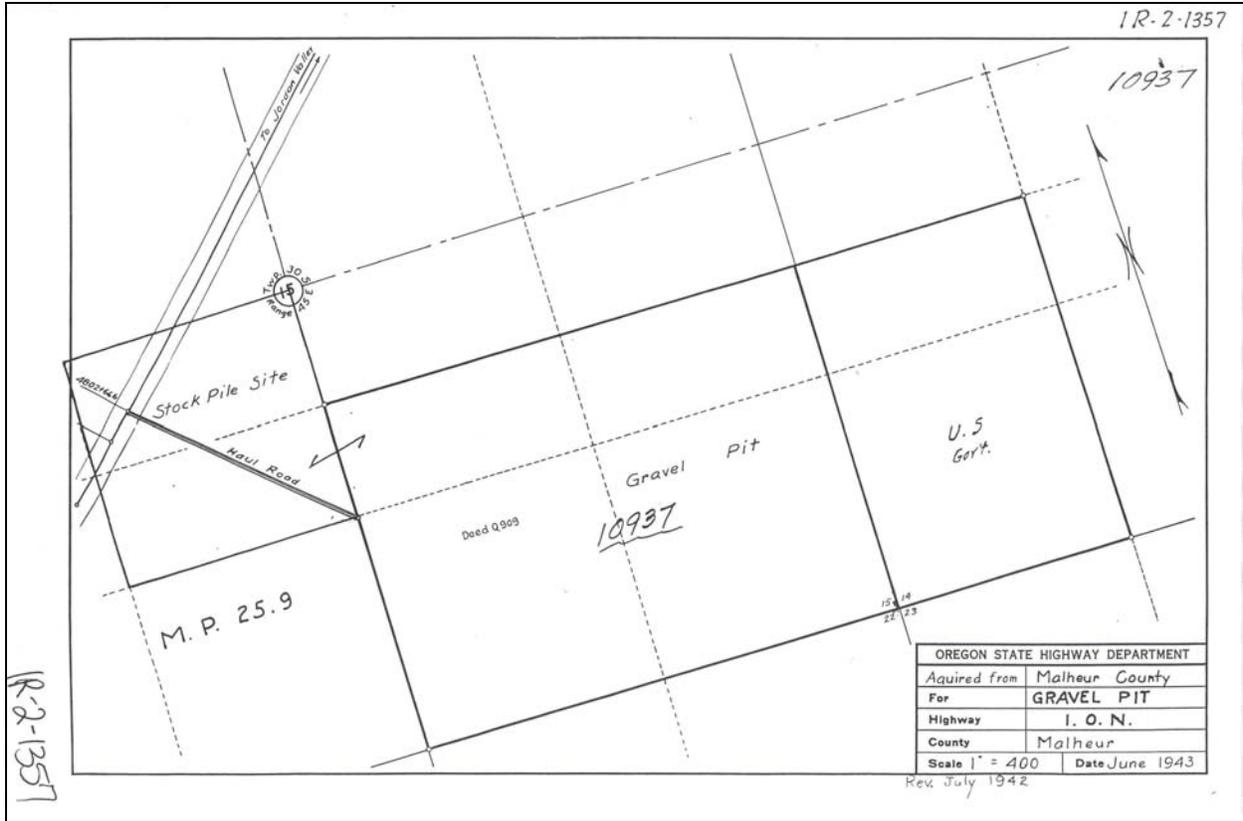
Aerial view of the quarry site located west of Highway 95.



County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur					14	0456	29.3	30S	45.0E	15
File ID		Source #	Date Visited	Map #		Type of Site				
10910, 10937		23-068-5	06/28/2001	1R-2-1357, 1R-2-1359		Borrow				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42 56'46.52497"	117 11'51.33946"	1413.802	160	<1						
Comments										
GPS acquired in the pit.										
Rock Type	Unit	Color		Weathering			Jointing			
Volcanic Gravel	Ts	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair to Poor			NA	120	100,000	150,000				
Potentially Significant Site	Why			Open/Closed	Direction					
No	Poor quality/ size of gravel			Closed	NA					
Adjacent Land Use										
Open Space										
Remarks										
This site is located east of and adjacent to Highway 95. The material is composed of pebble size volcanic gravel (40%) and silt/sand (60%). There is a small disturbance at the top of the hill. The terrain is moderate 15 degrees with no screening and ample room to work.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



Aerial view of the large borrow site located east of Highway 95.



County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur				14	0456	39.90	31S	44.0E	06
File ID		Source #	Date Visited	Map #			Type of Site		
10957, 10971		23-070-5	06/28/2001	1R-2-1364, 1R-2-1360			Borrow		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #				
42 53'14.50698"	117 22'49.15770"	1289.718	160	<6					
Comments									
GPS acquired in the pit									
Rock Type	Unit	Color		Weathering			Jointing		
Volcanic Gravel	Ts	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Poor			NA	120	100,000	150,000			
Potentially Significant Site	Why			Open/Closed	Direction				
No	USA Ground			Closed	Rock Creek is adjacent to the east				
Adjacent Land Use									
Open Space									
Remarks									
This site is located north of Highway 95 approximately 150 meters. The material at this site is composed of 5% cobble size, 35% small pebble size and 60% sand/silt. The terrain is flat to gradual with limited to no screening and ample room to work.									
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 Highway 95.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur	Rome Gravel Pit				14	0456	52.2	31S	41.0E	14
File ID		Source #	Date Visited	Map #			Type of Site			
21883		23-073-5	07/10/2001	1R-5-535			Raw Land			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42 51'36.77000"	117 39'46.05000"	1037	120	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color	Weathering			Jointing				
Volcanic Gravel	Qf	NA	NA			NA				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair			NA	120	50,000	75,000				
Potentially Significant Site	Why			Open/Closed	Direction					
No	USA Ground			Closed	NA					
Adjacent Land Use										
Farming/ Open Space										
Remarks										
This ground is located northwest of Highway 95 about 2.5 miles. This is raw land with no past disturbance. The terrain is flat with some screening from the highway and ample room to work. The material is composed of 40% cobble size and less gravel with the bulk in the small pebble range. There is 60% sand/silt remaining. The site is located at the base of the Rome Cliffs/ The Pillars, a scenic wonder in the State of Oregon.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

S

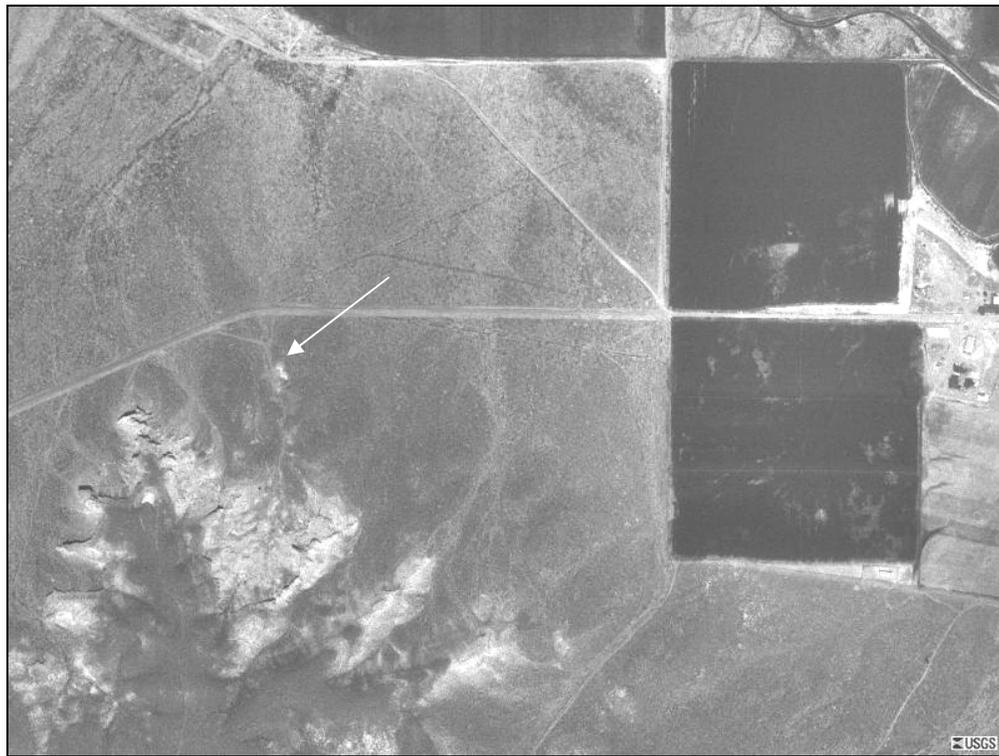
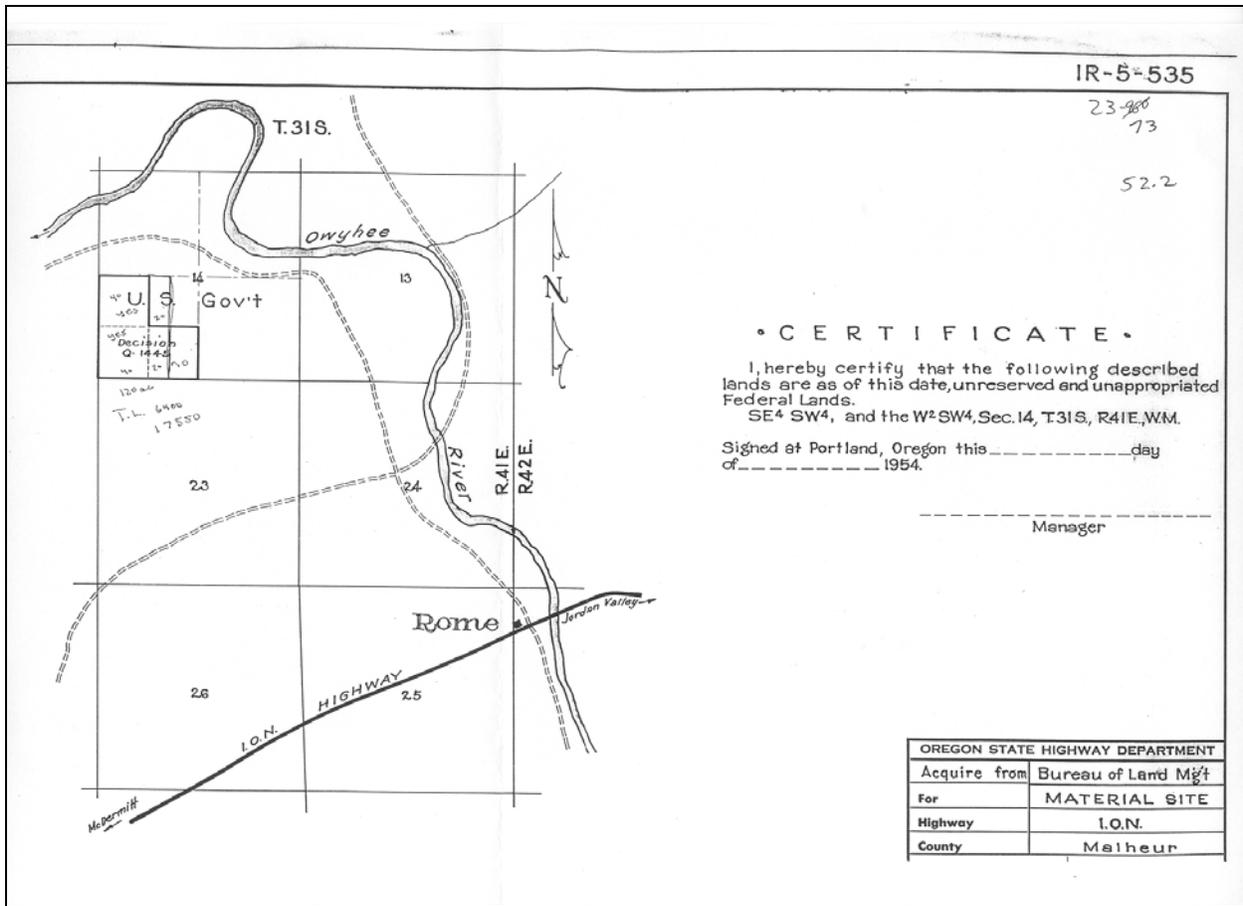
N



View of the raw land site near the Rome Cliffs.



Close-up view of the ground at this site.



Aerial view of the raw land site near the Rome Cliffs.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur	Rome pit				14	0456	52.6	31S	41.0E	24
File ID		Source #	Date Visited	Map #			Type of Site			
06914A, 06201		23-074-5	07/10/2001	1R-2-642			Gravel			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42 50'31.69267"	117 38'09.10541"	1052.526	6.11	<18	23-0039					
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)				
Fair			NA	120	0	0				
Potentially Significant Site	Why		Open/Closed	Direction						
No	Too Small, quality variable		Closed	To the east approximately 600 meters is the Owyhee River						
Adjacent Land Use										
Farming										
Remarks										
This site is located northwest of Highway 95 about 0.25 miles. The material is composed of 35% pebbles, 5% cobbles and 60% sand/ silt mix. The pebbles are on the small size. The terrain is flat with no screening and ample room to work. The pit floor is level with the adjacent gravel road. Part of the ground has been reclaimed and part is used for waste material.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.53	2.54	23.7	2.9	3.7	13.6	0.4				
Material Use										
EAC, BASE AC (1990)										

SE

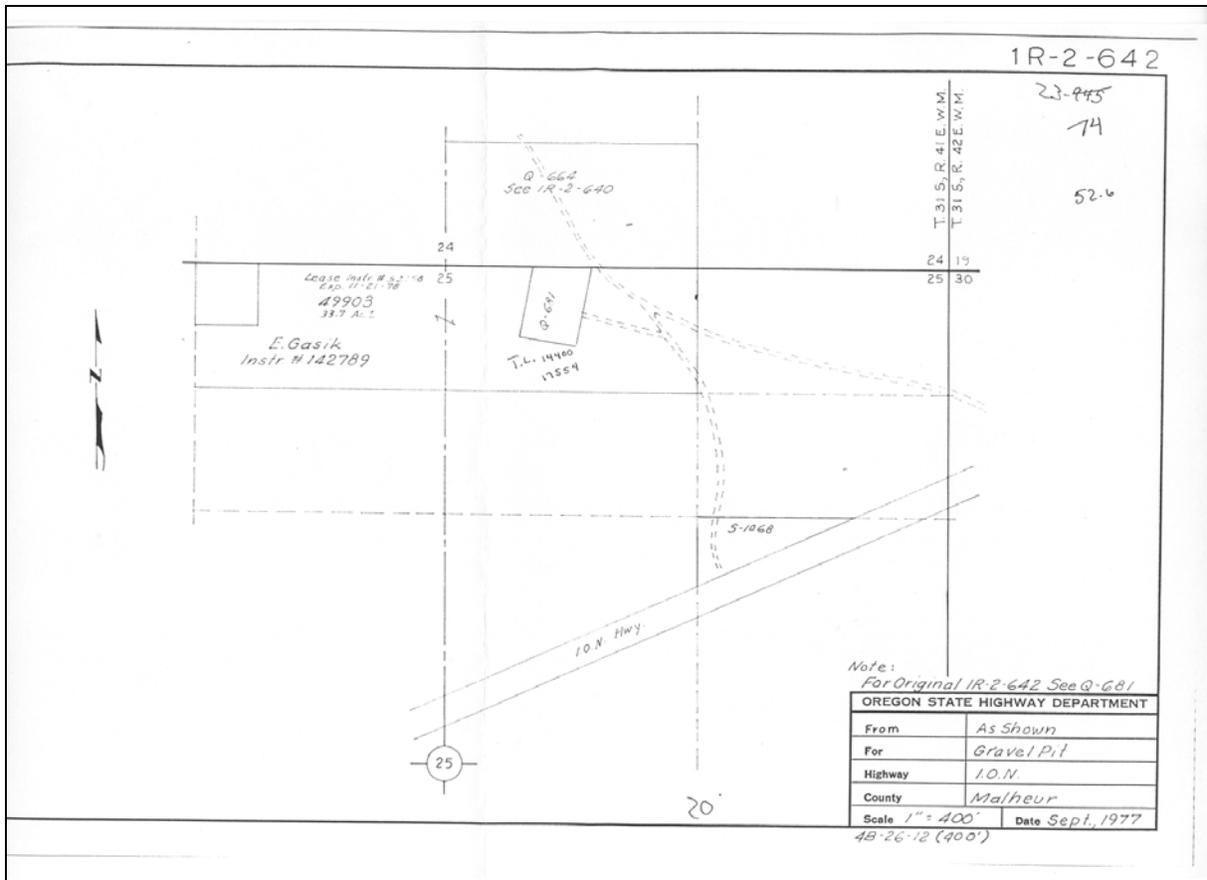
NE



View of the gravel site located northwest of Highway 95.



Close-up view of the ground at this site.



DOGAMI aerial view of the site near Rome, OR.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur					14	0456	60.6	32S	40.0E	01, 11, 12
File ID		Source #	Date Visited	Map #		Type of Site				
06200, 06904A, 06903		23-076-5	07/11/2001	1R-2-644, 1R-2-643		Borrow				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42 47'07.86000"	117 45'58.66000"	1130	24.33	<1						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering		Jointing				
Volcanic Colluvium	Ts	NA		NA		NA				
Quality			Hardness	lbs./cu ft.	Reserve (cy)		Reserve (Tons)			
Poor			NA	120	450,000		712,800			
Potentially Significant Site	Why		Open/Closed		Direction					
No	USA Ground		Closed		East approximately 300 meters is Crooked Creek					
Adjacent Land Use										
Open Space/ Ranching										
Remarks										
Highway 95 bisects this ground. There appears to be a small disturbance south of the highway with no access. The material is composed of 70% ash and 30% small pebbles. There is a small thin basalt flow within the area. The terrain is gradual with some dry draws. There is no screening. This site covers 24.33 acres along the highway near the Crooked Creek Spring Roadside Rest Area.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

NW

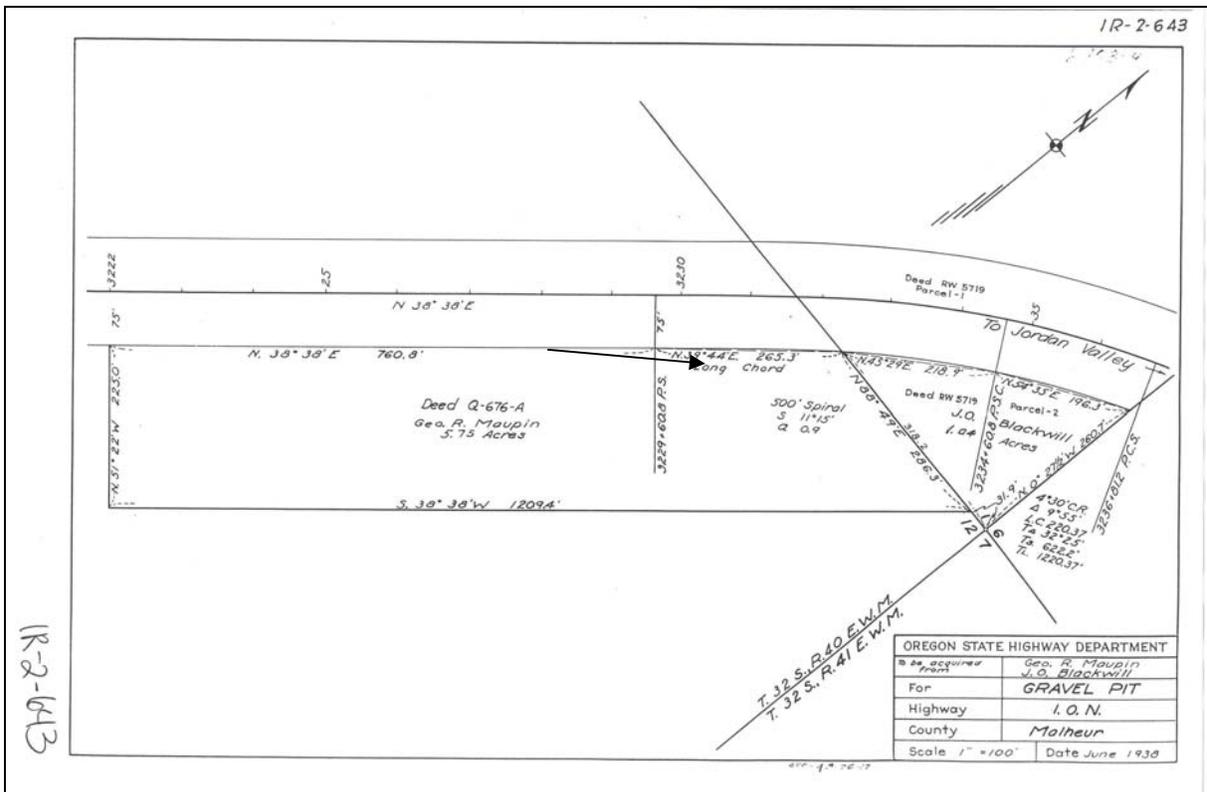
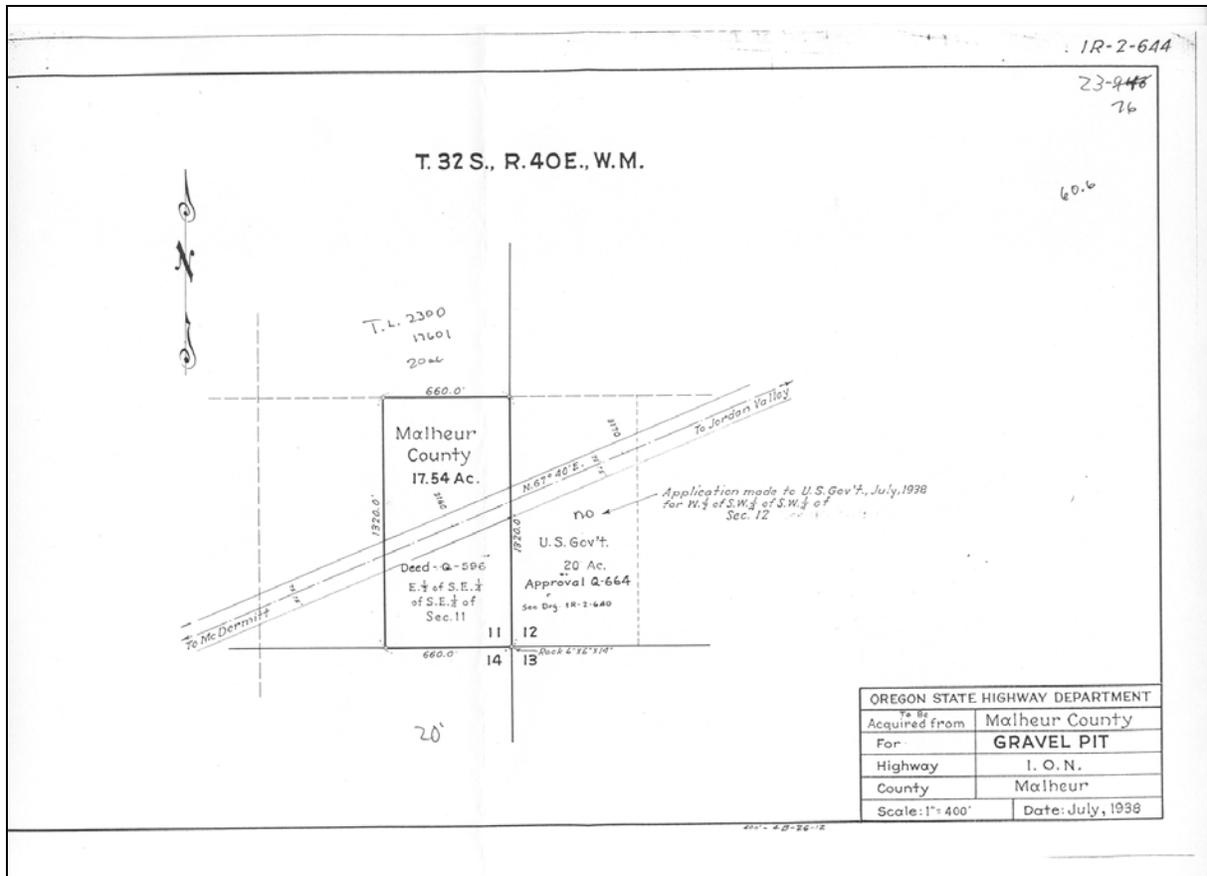
SW



View of the borrow site, looking west with Highway 95 bisecting the property.



Close-up view of the gravel at this site.



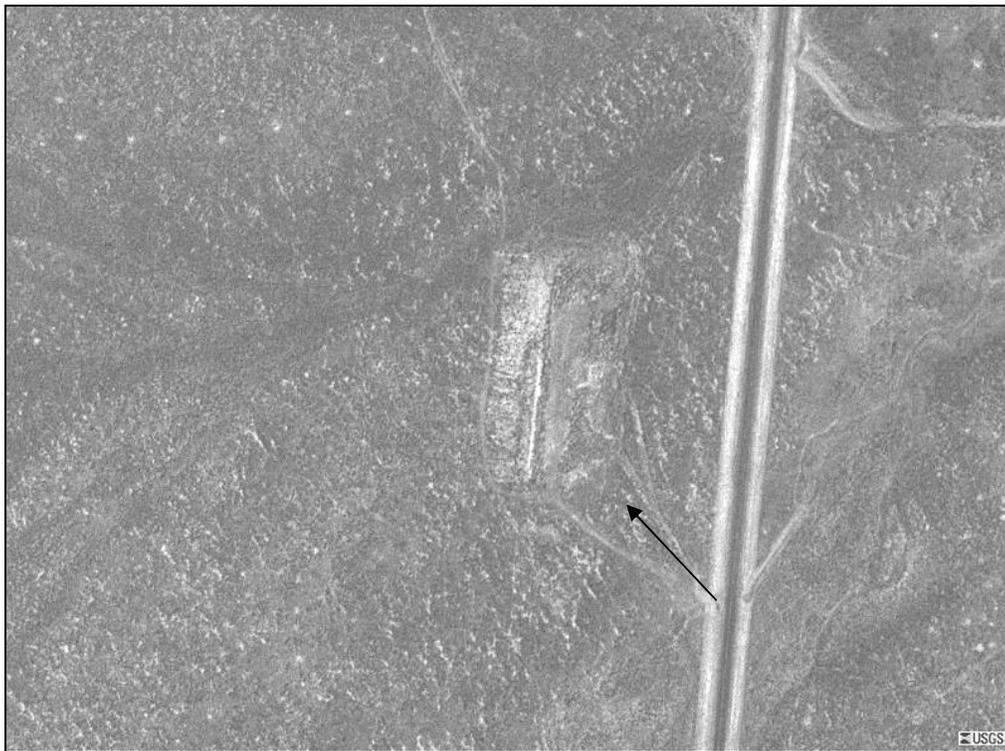
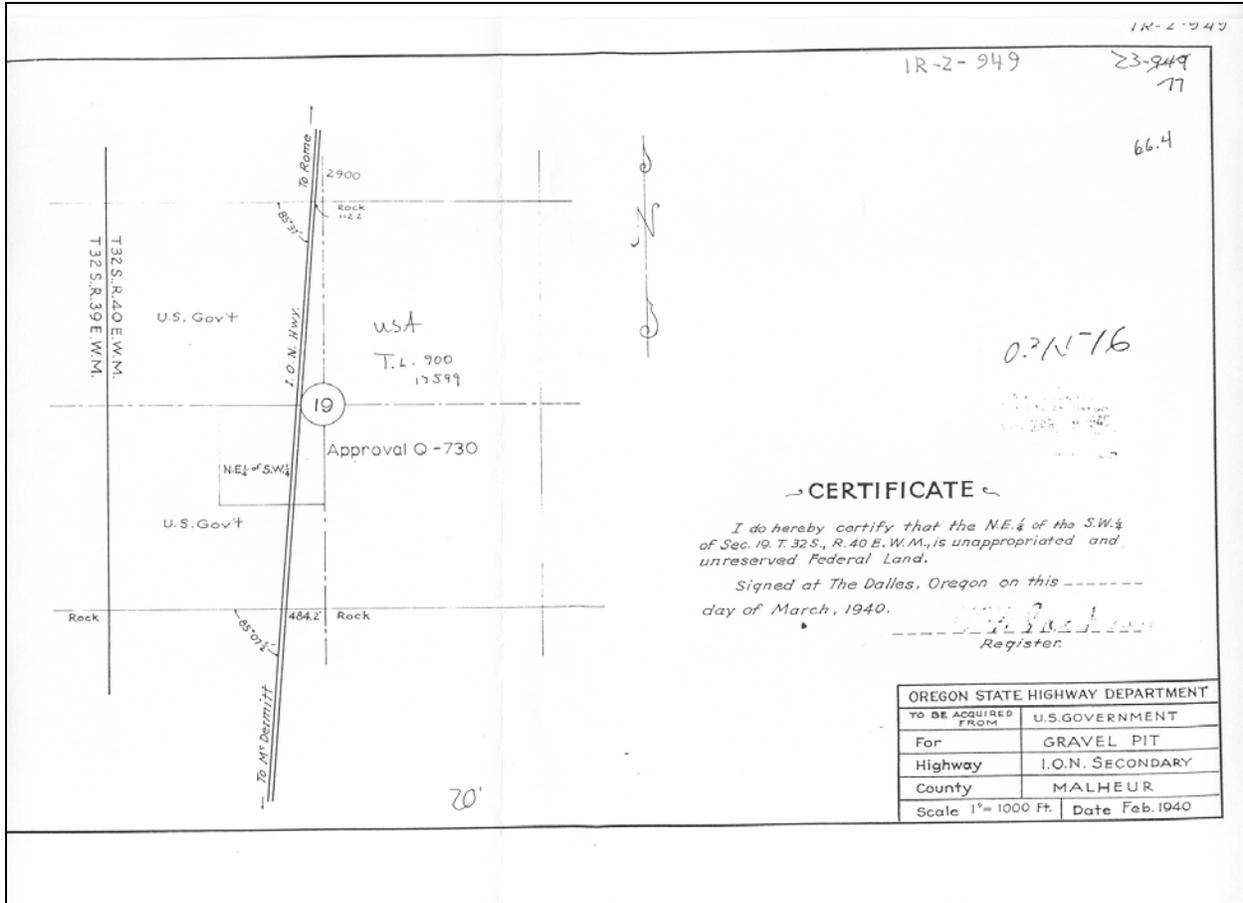
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur					14	0456	66.4	32S	40.0E	19
File ID		Source #	Date Visited	Map #			Type of Site			
Q0730		23-077-5	07/10/2001	1R-2-949			Borrow			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42 45'33.88640"	117 51'26.74197"	1204.856	40	<2						
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)				
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										
Highway 95 bisects this ground South of the Burns Junction about 1 mile. The borrow pit is located west of the highway a short distance. The material is composed of ash (70%) and colluvium (small gravel) 30%. Maintenance uses this site for waste rocks. The ground is flat with no screening from the highway.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



View of the borrow site south of Burns Junction with Highway 95 bisecting the property.



Close-up view of the aggregate at this site.



Aerial view of the site on either side of Highway 95.

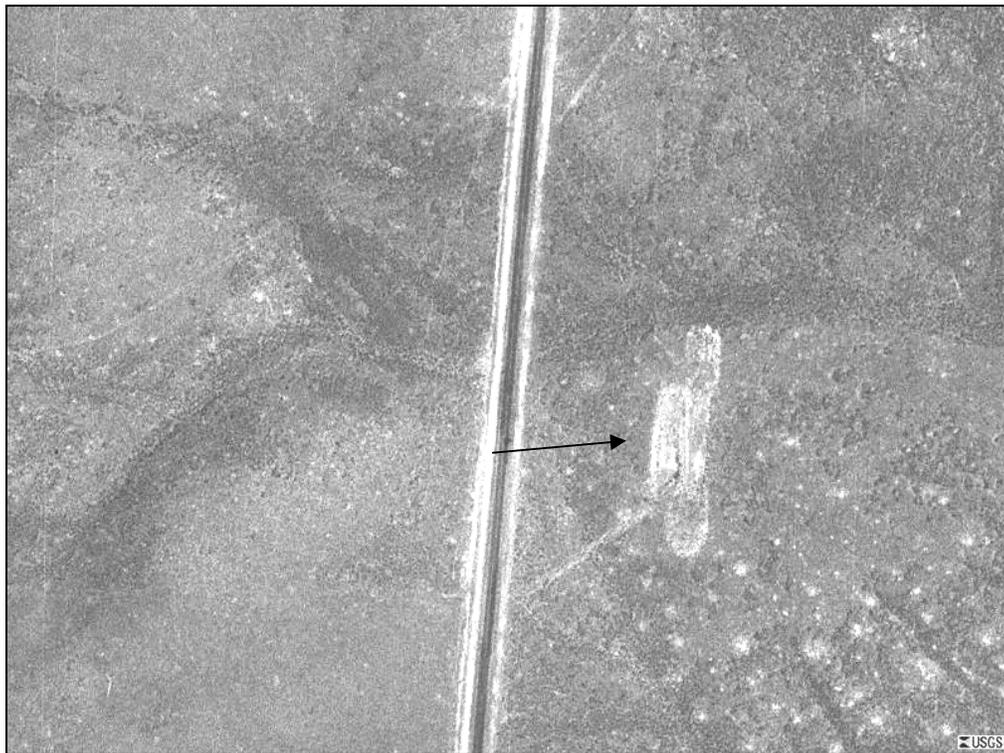
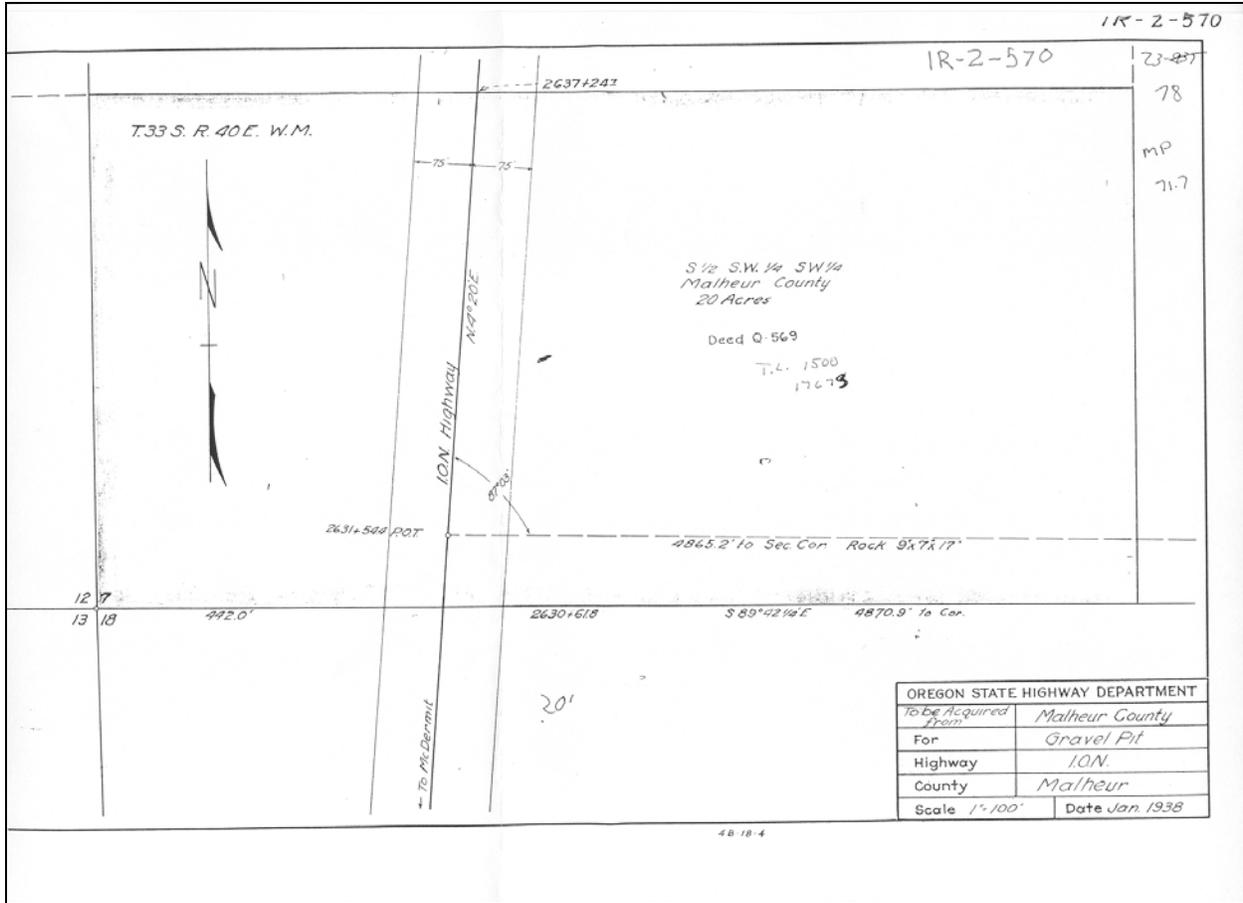
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur					14	0456	71.7	33S	40.0E	07
File ID		Source #	Date Visited		Map #			Type of Site		
05798		23-078-5	07/11/2001		1R-2-570			Borrow		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42 41'53.13000"	117 51'36.78000"	1188	20	<1						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
Volcanic	Qf	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair			NA	120	320,000	518,400				
Potentially Significant Site	Why			Open/Closed	Direction					
No	NA			Closed	NA					
Adjacent Land Use										
Open Space										
Remarks										
Highway 95 bisects the ground, the pit however is east of the highway. The material at this site is composed of angular volcanic rocks of various size, with the largest around cobble size. There is about 40% rock to 60% sand/silt. There is no access to the ground with no screening. The terrain is flat to gradual.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
		15.0								
Material Use										
AC (1983)										

NE

SE



View of the borrow site looking east across Highway 95.

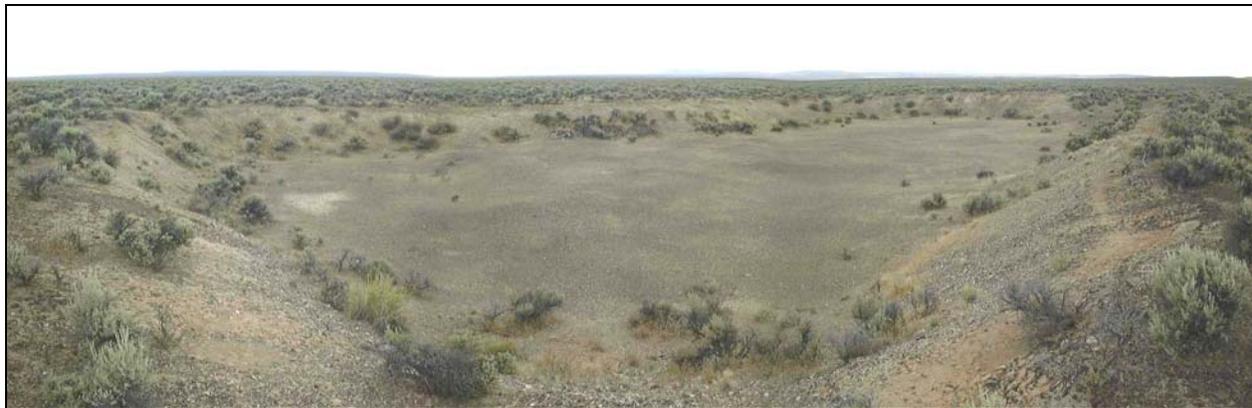


Aerial view of the borrow site along Highway 95.

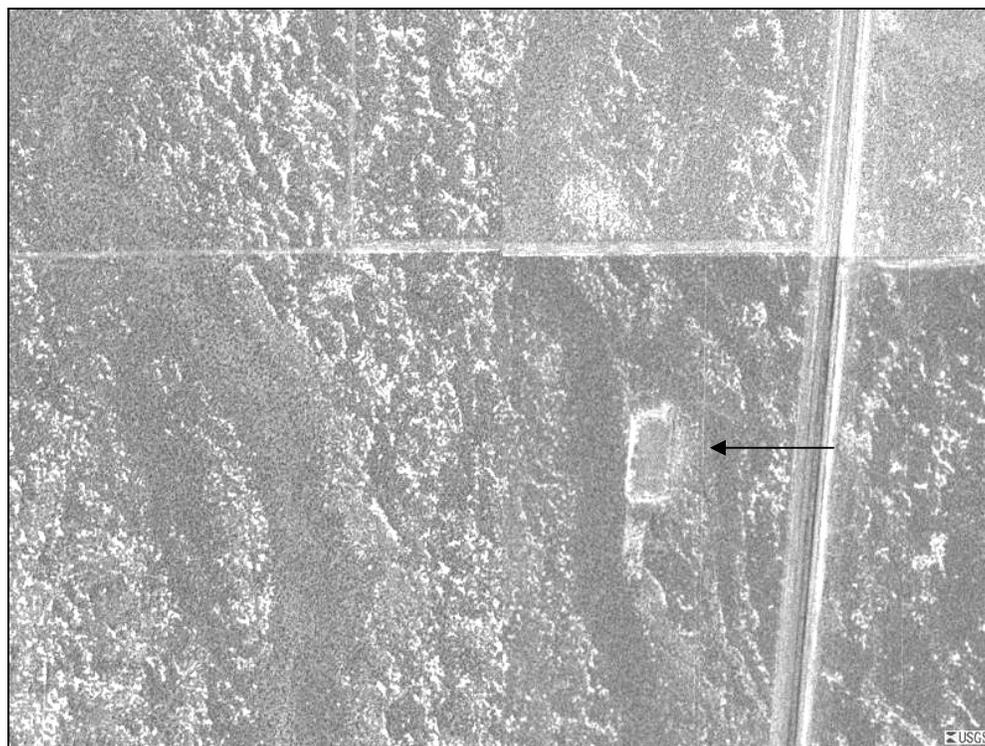
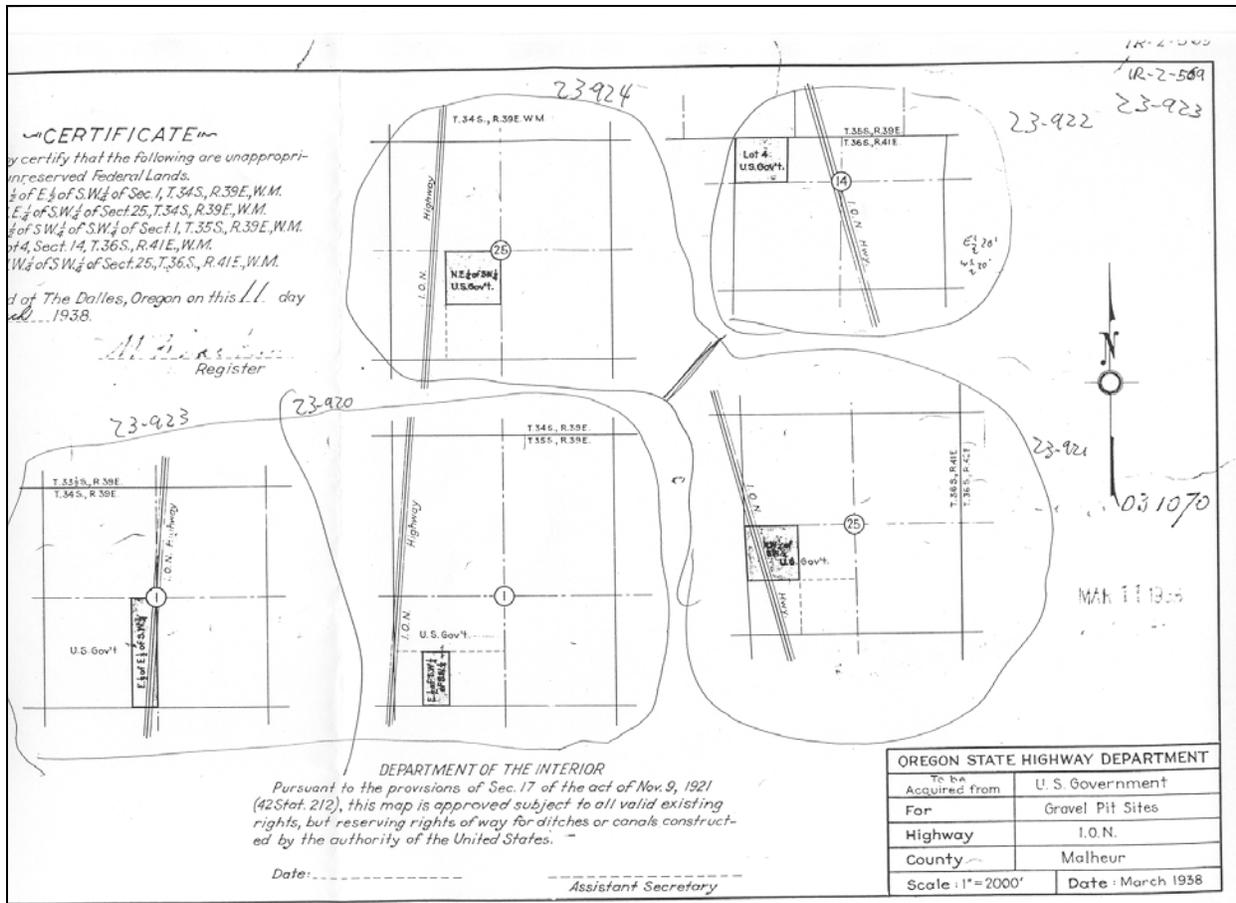
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur					14	0456	77.30	34S	39.0E	1
File ID		Source #	Date Visited		Map #			Type of Site		
Q0587		23-079-5	07/11/2001		1R-2-569			Borrow		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42 37'13.35000"	117 52'17.11000"	1216	40	<1						
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 Poor			NA	120	320,000	518,400				
Potentially Significant Site	Why			Open/Closed	Direction					
No	USA Ground			Closed	NA					
Adjacent Land Use										
Open Space										
Remarks										
Highway 95 bisects this ground. The small borrow pit is west of the highway. The terrain is flat with no screening from the highway. The material is composed of volcanic colluvium (45%) and sand/silt (55%) of variable quality.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.62			7.2							
Material Use										
PCC (1988)										

W

N



View looking from Highway 95 at the small borrow pit.



Aerial view of the site bisected by Highway 95.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur	Flight Strip Pit				14	0456	79.2	34S	39.0E	13
File ID		Source #	Date Visited		Map #			Type of Site		
Q0739		23-080-5	07/11/2001		1R-2-868, 1R-5-785			Borrow		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #				
42 35'13.93531"	117 52'06.51273"	1251.807	40	Multiple						
Comments										
GPS acquired in the pit										
Rock Type	Unit	Color		Weathering			Jointing			
Volcanic Colluvium	Qf	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair			NA	120	160,000	259,200				
Potentially Significant Site	Why			Open/Closed	Direction					
No	USA Ground			Closed	NA					
Adjacent Land Use										
Open Space/ Radio Facility										
Remarks										
Highway 95 bisects this ground, the pits are located on the east side. The material is composed of small boulders (2%), cobble size (23%), pebble size (25%) and sand/silt (50%). The terrain is flat with no screening and ample room to work.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
	2.37	19.6	15.1	2.6			21.6	5.3		
Material Use										
(1975)										

SE

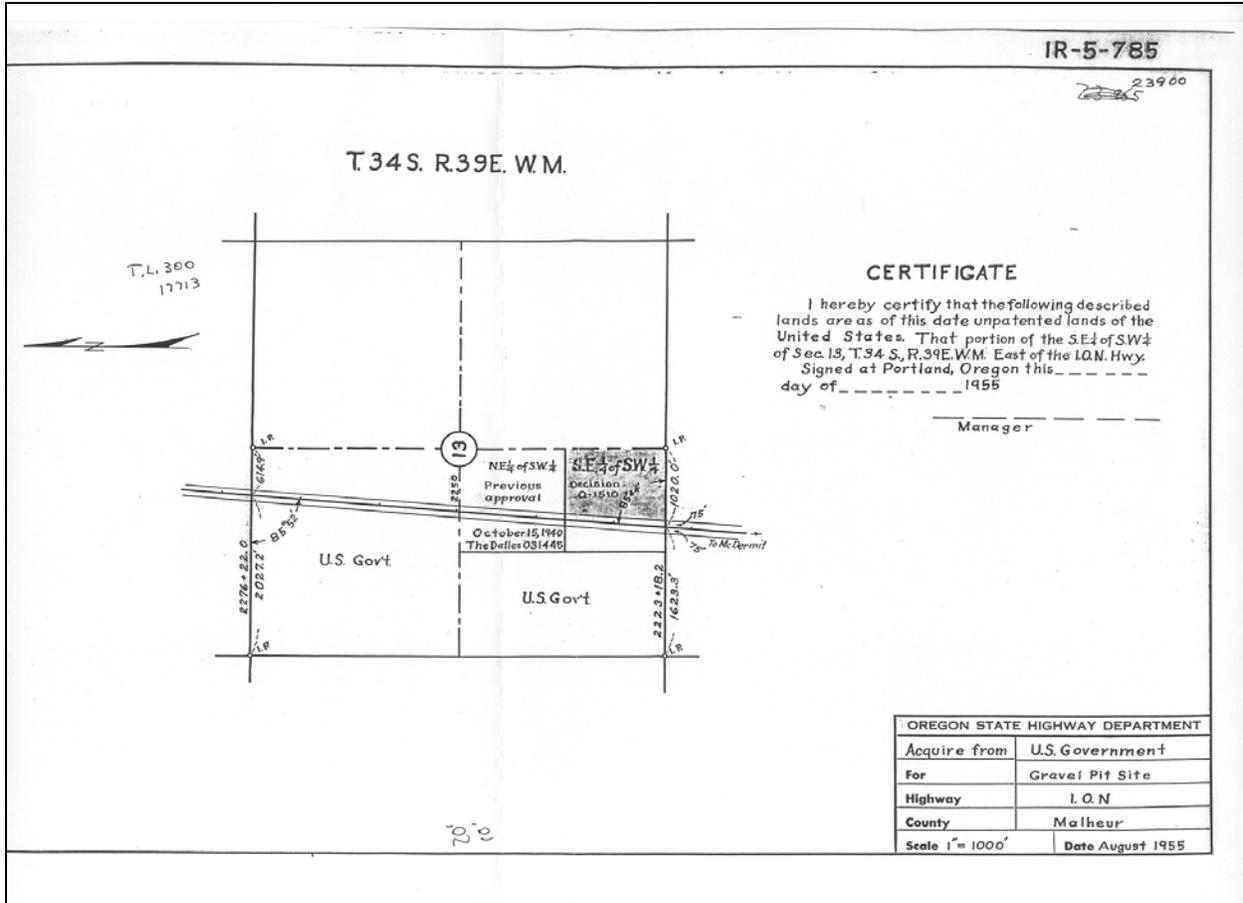
N



View of the borrow pits looking east from Highway 95.



Close-up view of the aggregate at this site.



Aerial view of the borrow site along Highway 95.

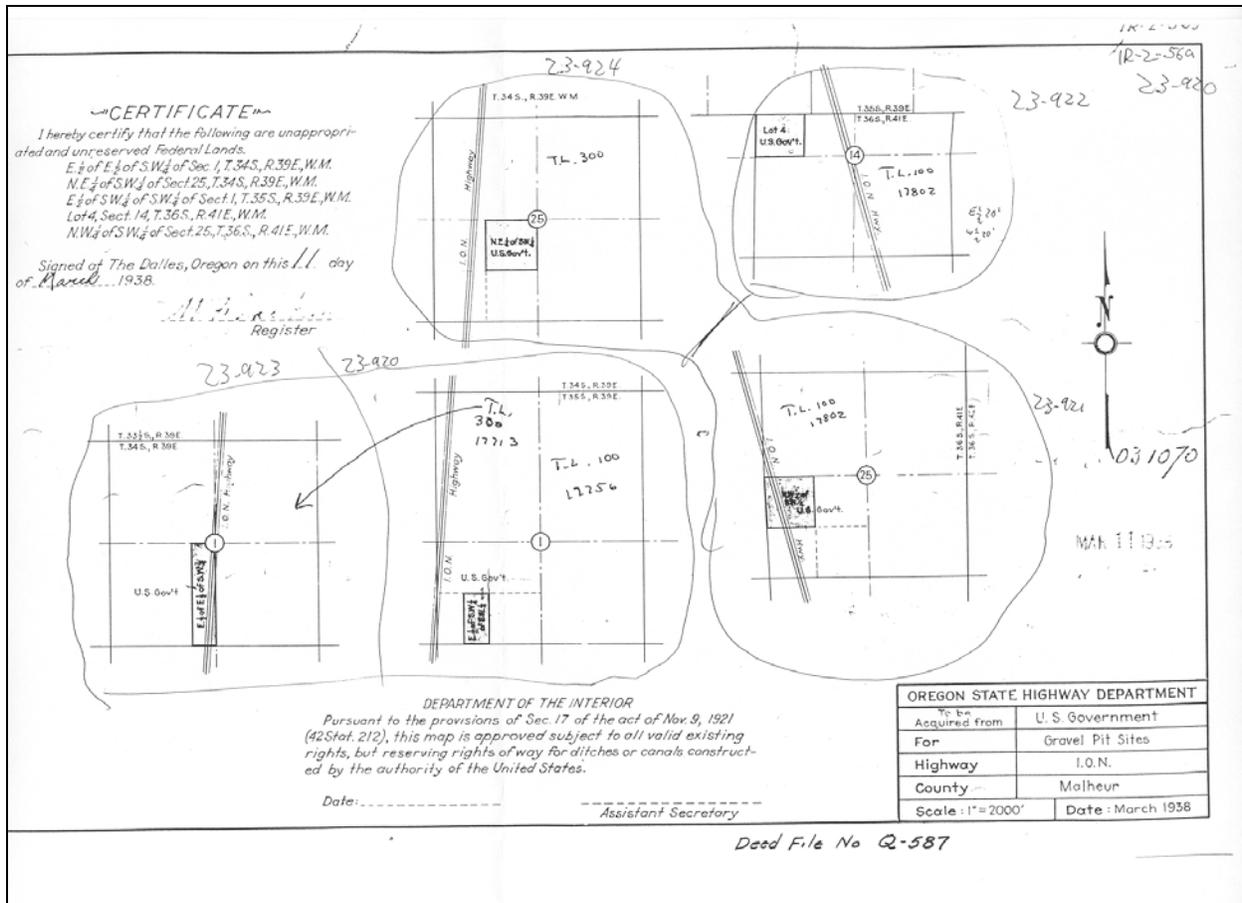
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur				14	0456	83.60	35S	39.0E	01
File ID		Source #	Date Visited	Map #			Type of Site		
Q0587		23-082-5	07/11/2001	1R-2-569			Borrow		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
42 31'33.47000"	117 52'35.02000"	1280	80	<1					
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)			
Poor			NA	120	320,000	518,400			
Potentially Significant Site	Why			Open/Closed	Direction				
No	USA Ground			Closed	NA				
Adjacent Land Use									
Open Space									
Remarks									
This site is located east of Highway 95 about 300 meters. The material is composed of small boulders (10%) cobble/pebble size (30%) and sand/silt (60%). The terrain is flat with no screening and no access.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									



View of the borrow site off of Highway 95.



Close-up view of the rock at this location.



Aerial view of the borrow site adjacent to Highway 95.

County	Site Name		Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur	Basque Rock		14	0456	90.7	36S	41.0E	23, 26
File ID		Source #	Date Visited		Map #		Type of Site	
12280		23-085-5	07/17/2001		1R-2-1548		Borrow	
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #			
42 25'41.68553"	117 52'08.33419"	1341.879	80	<3				
Comments								
GPS acquired in the pit								
Rock Type	Unit	Color		Weathering		Jointing		
Volcanic Colluvium	Qf	NA		NA		NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)		
Fair to Poor			NA	120	1,600,000	2,592,000		
Potentially Significant Site	Why			Open/Closed	Direction			
No	USA Ground			Closed	NA			
Adjacent Land Use								
Open Space								
Remarks								
Highway 95 bisects this ground. The material is composed of volcanic gravel from the surrounding hills and ranges in size from cobble and less (40%) and silt/sand (60%). The terrain is flat 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.
	2.62							
Material Use								
CLASS B, A/C								

W

SW



View of the borrow site along Highway 95.



Close-up view of the material at this site.

IR-2-1548
 032178
 23-225
 85
J. M.
 MP
 90.7

u st

T. 36 S., R. 41 E. W. M.

CERTIFICATE

I hereby certify that the following described lands are, as of this date, unappropriated and unreserved Federal Lands, except that they are in Public Trust (Sec. 21 W. Stat. 15) T. 36 S., R. 41 E. W. M.

SE 4 of SE 4 Sec. 23
NE 4 of NE 4 Sec. 26

Signed at The Dalles, Ore. this *1st* day of *October* 1945

.....
Register

OREGON STATE HIGHWAY DEPARTMENT	
Acquire from	U.S. Government
For	GRAVEL DEPOSIT
Highway	I. O. N.
County	Malheur
Scale 1 in = 2000 ft	Date Sept., 1945

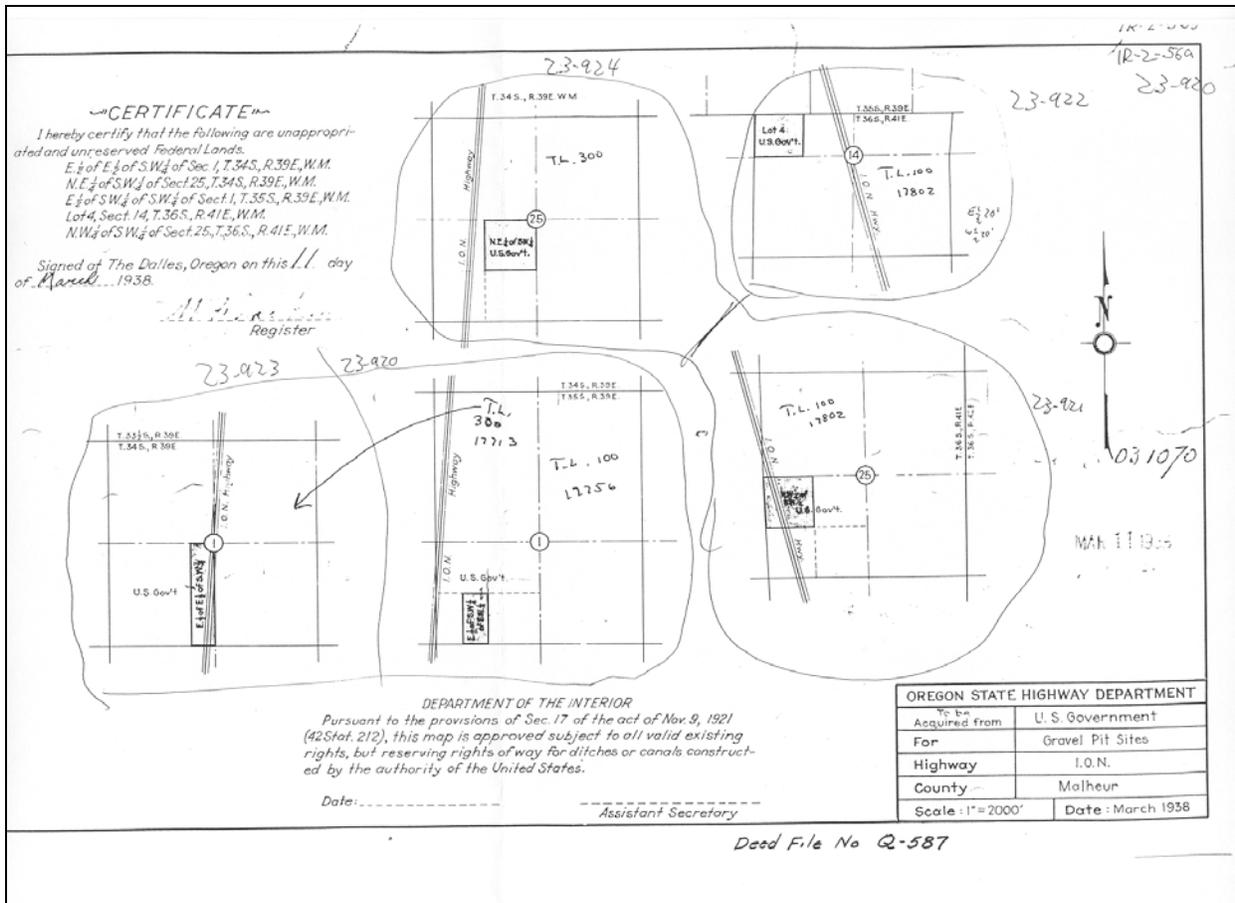
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur				14	0456	96.20	36S	41.0E	25
File ID		Source #	Date Visited	Map #			Type of Site		
Q0587		23-086-5	07/11/2001	1R-2-569			Borrow		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #				
42 25'03.66760"	117 51'46.88373"	1368.194	40	<3					
Comments									
GPS acquired in the pit									
Rock Type	Unit	Color	Weathering			Jointing			
Volcanic Colluvium	Qf	NA	NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Fair to Poor			NA	120	640,000	1,036,800			
Potentially Significant Site	Why			Open/Closed	Direction				
No	USA Ground			Closed	NA				
Adjacent Land Use									
Open Space									
Remarks									
Highway 95 bisects this ground. The material is composed of 45% small gravel and 55% sand/silt. The terrain is flat with no screening and ample room to work. Basque Station is to the south approximately 800 meters.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									



View of the borrow site located north of Basque Station.



Close-up view of the aggregate at this site.



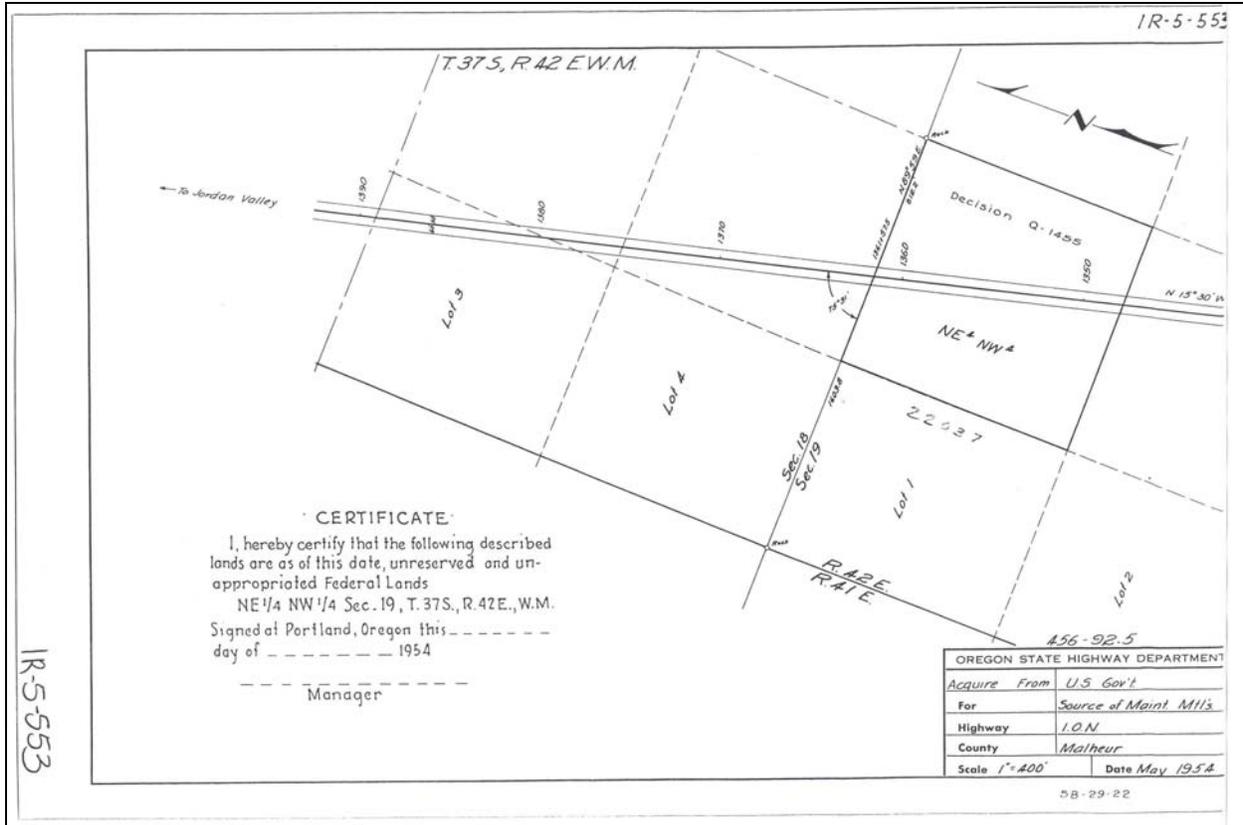
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur					14	0456	95.10	37S	42.0E	19
File ID		Source #	Date Visited	Map #			Type of Site			
22037		23-087-5	07/17/2001	1R-5-553			Raw Land			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42 21'09.18000"	117 50'20.10000"	1522	40	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
Basalt	Tba	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair to Poor			NA	150	484,000	980,100				
Potentially Significant Site	Why			Open/Closed	Direction					
No	USA Ground			Closed	NA					
Adjacent Land Use										
Open Space										
Remarks										
This site is located east of Highway 95 and south of site 23-917-5. There is no prior disturbance that is visible. From the evaluation of site 23-917-5 this site would comprise a mix of fair to poor quality basalt. There is no screening from the highway, with ample room to work. All work should proceed from the top down.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

NE

SE



View looking east across Highway 95 at the raw land site.



Aerial view of the raw land site located east of Highway 95 and south of site 23-917-5.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur				14	0456	97.20	39S	42.0E	26
File ID		Source #	Date Visited	Map #			Type of Site		
12256		23-088-5	07/17/2001	1R-2-1545			Raw Land		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
42 09'15.94000"	117 45'20.04000"	1398	10	NA					
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)			
Poor			NA	120					
Potentially Significant Site	Why			Open/Closed	Direction				
No	USA Ground			Closed	NA				
Adjacent Land Use									
Open Space/ Ranching									
Remarks									
This site is located west of and adjacent to Highway 95. The ground is flat with no screening from the highway. The local rancher has fenced the ground with no access. It appears the soil has little to no gravel at this location. Small acreage.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

SE

SW



View of the site located west of and adjacent to Highway 95.

County	Site Name		Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur	Hot Springs Rd.		14	0456	116.3	40S	42.0E	24, 25
File ID		Source #	Date Visited		Map #		Type of Site	
17271, 08552		23-091-5	07/17/2001		1R-5-103, 1R-2-1062		Borrow	
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #			
42 04'28.23733"	117 43'49.92997"	1412.947	76.9	<10				
Comments								
GPS acquired in the pit								
Rock Type	Unit	Color		Weathering		Jointing		
Volcanic Colluvium	Qf	NA		NA		NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)		
Fair			NA	120	1,750,000	2,835,000		
Potentially Significant Site	Why			Open/Closed	Direction			
No	USA Ground			Closed	NA			
Adjacent Land Use								
Open Space								
Remarks								
Highway 95 bisects this ground. The material is composed of volcanic gravel from the surrounding hills. The size ranges from small boulder and less (60%) and sand/silt (40%). The terrain is flat with limited to no screening. There are multiple pits with ample room to work. There is no gate and the pits are open for anyone to use.								
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.
2.34	2.36	23.4	5.0	3.1			12.4	1.2
Material Use								
AC SHLD (1992)								

SE

NW



View of the borrow site along Highway 95.



Close-up view of the rock at this site.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur	Crooked Cr. Quarry				14	0456	72.6	33S	40.0E	19
File ID		Source #	Date Visited	Map #		Type of Site				
49480		23-102-5	07/11/2001	1R-4-629		Quarry				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42 40'48.39719"	117 51'35.22207"	1216.594	20	<12	23-0098					
Comments										
GPS acquired in the pit										
Rock Type	Unit	Color		Weathering		Jointing				
Basalt	Tba	Medium Light Grey (N6)		Slight		Highly Fractured				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good to Fair			R3	152	600,000	1,231,200				
Potentially Significant Site	Why			Open/Closed	Direction					
Yes	Only hard rock in the area.			Closed	NA					
Adjacent Land Use										
Open Space										
Remarks										
This site is located on both sides of Highway 95, with the pit adjacent east of the highway. The rock here is a fine-grain, basalt that is very platy. The fracture planes have moderate weathering and secondary mineral alteration. You can rip the rock, but care should be used not to create to tall of a pit face. There is fair screening with room to work. All waste rock should not be disposed in the pit, but some where else. 500,000 cubic yards have been removed.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.13	2.33	20.0	7.6	5.4	15.1	2.4	17.0	2.5		
Material Use										
(1977)										

SE

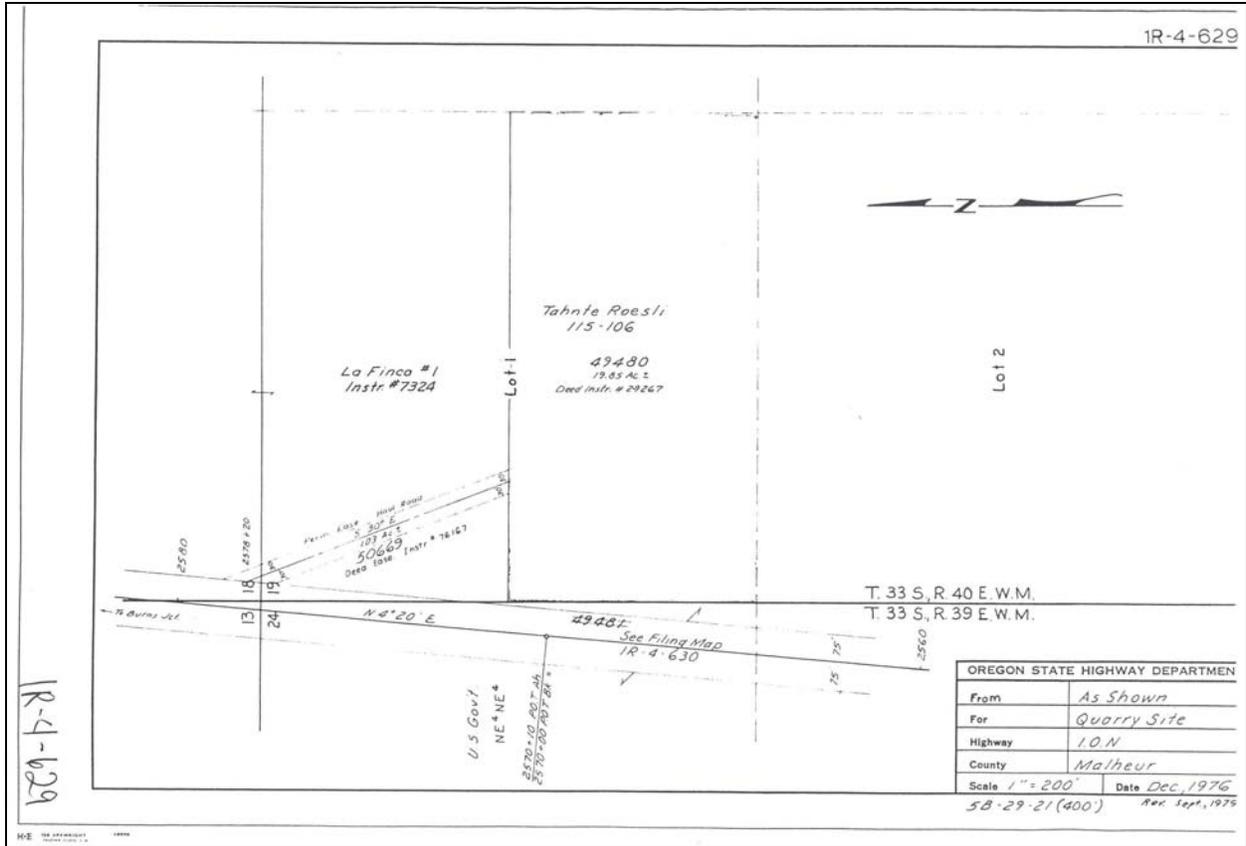
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View of the quarry site.



Close-up view of the quarry wall.

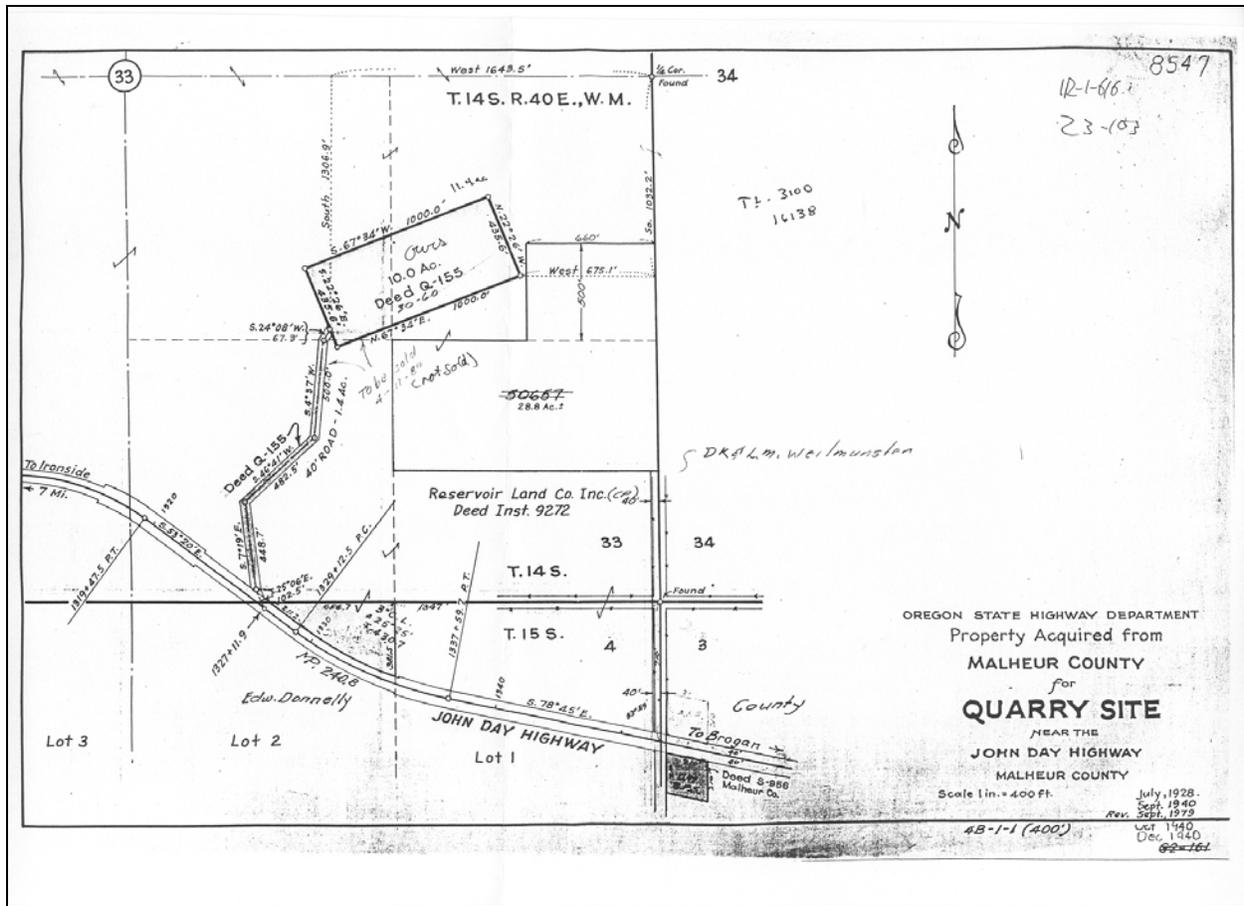


Aerial view of the quarry located on both sides of Highway 95.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur					14	0005	237.5	14S	40.0E	33
File ID		Source #	Date Visited	Map #			Type of Site			
Q0155		23-103-5	06/06/2001	1R-1-616			Raw Land			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
44 18'09.66000"	117 48'53.21000"	1224	10	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
Basalt	Ts	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Poor			NA	120	200,000	324,000				
Potentially Significant Site	Why			Open/Closed	Direction					
NA	NA			Closed	NA					
Adjacent Land Use										
Open Space										
Remarks										
This site is located north of Highway 26 about 600 meters. There is no access or road to this site. I did not hike in, to evaluate this ground. From the laboratory reports this rock passes our specifications. We would need to develop access and a site plan if we wish to use this ground. It appears to occupy a dry draw.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
2.2	2.29	13.9	2.6	1.4	15.3	3.4	17.4	3.9		
Material Use										
AC (1979)										



View of the raw land site located north of Highway 26.



Aerial view of the site approximately 600 meters north of Highway 26.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur					14	0007	191.9	21S	38.0E	10
File ID		Source #	Date Visited	Map #		Type of Site				
21859		23-106-5	06/13/2001	1R-5-531		Road Cut				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
43 46'09.04000"	118 02'46.13000"	913	40	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
Basalt	Tba	Medium Grey (N5)		Slight			Massive to Highly Fractured			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Good			R3	166						
Potentially Significant Site	Why			Open/Closed	Direction					
No	USA Ground			Closed	Malheur River bisects the ground					
Adjacent Land Use										
Open Space										
Remarks										
Highway 20 bisects the property. The old and new alignment cut through this site. The rock here is a fine-grain basalt. There is very limited room to work, with some screening. The river is adjacent on three sides. Good ground for a stockpile site or small quantity of aggregate. Unique site in Oregon.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
	2.793			0.1	10.7	0.2				
Material Use										
RIP RAP AGGR (1996)										

SW

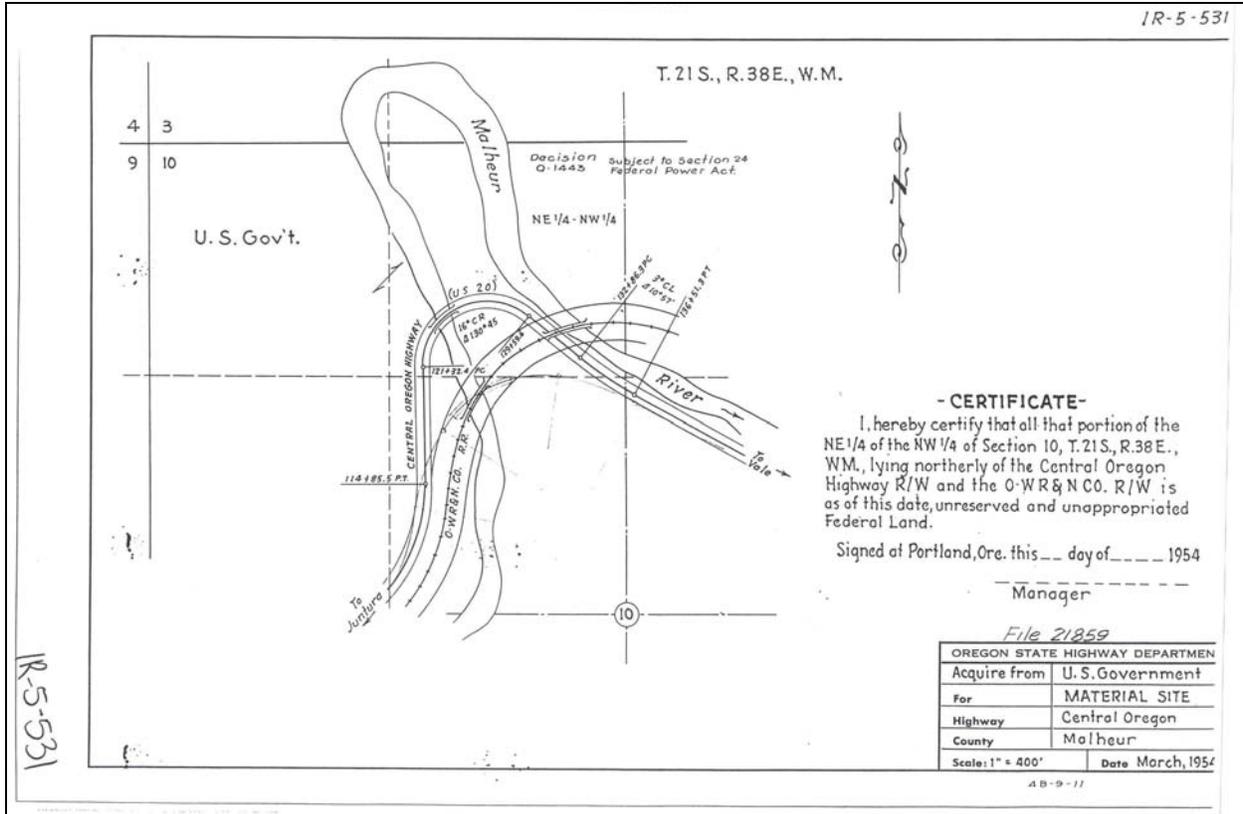
N



View of the road cut site on Highway 20 and the Malheur River.



Close-up view of the road cut face and the rock that comprises it.



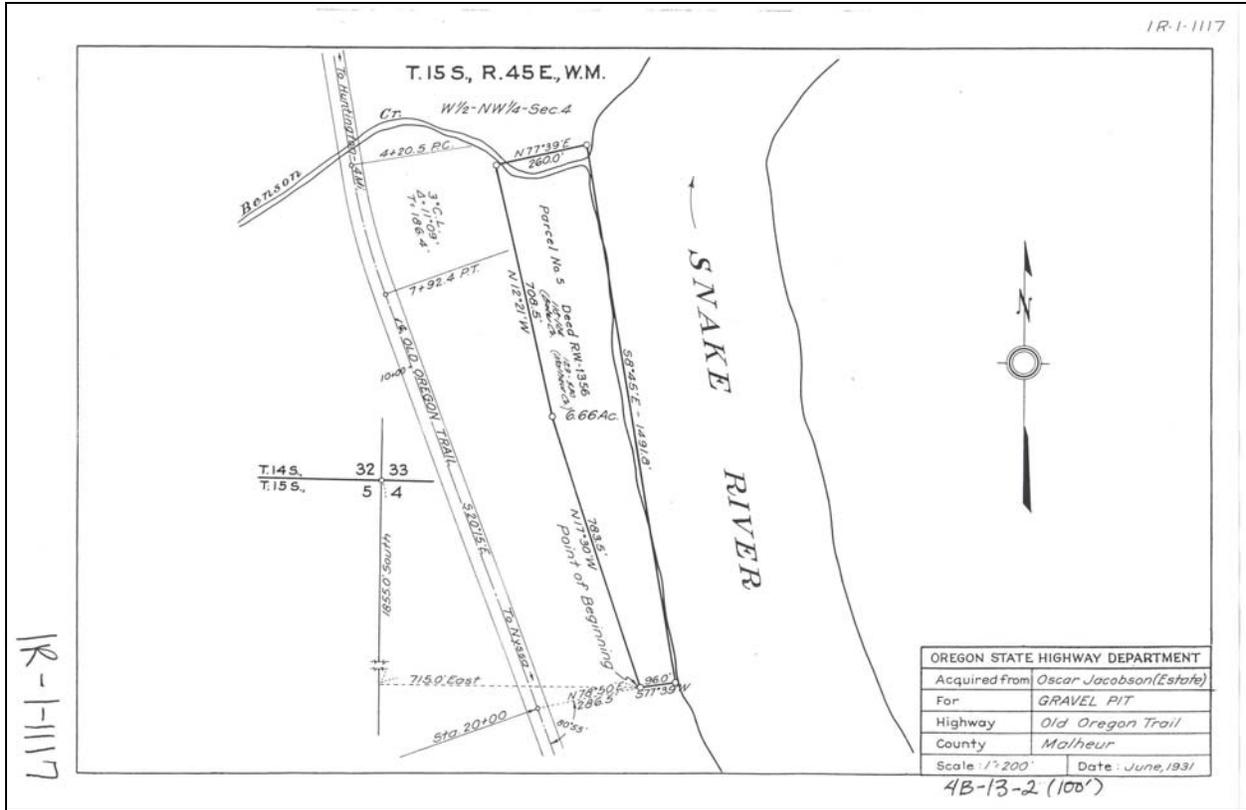
Aerial view of the road cut along Highway 20.

County	Site Name	Dist	Hwy	Mile Pt	TWP	RGE	Sect	
Malheur		14	0006	10	14S, 15S	45.0E	33, 04	
File ID		Source #	Date Visited	Map #		Type of Site		
01356		23-900-5	06/12/2001	1R-1-1117		Gravel		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #			
44 17'56.36000"	117 13'27.41000"	639	6.66	NA				
Comments								
Lat. and Long. acquired using Terrain Navigator Software								
Rock Type	Unit	Color	Weathering		Jointing			
NA	Qal	NA	NA		NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)		
NA			NA	120				
Potentially Significant Site	Why			Open/Closed	Direction			
No	Under Water			NA	In the Snake River.			
Adjacent Land Use								
Rural Residential								
Remarks								
This site is under water in the Brownlee Reservoir at full pool.								
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.
Material Use								

N



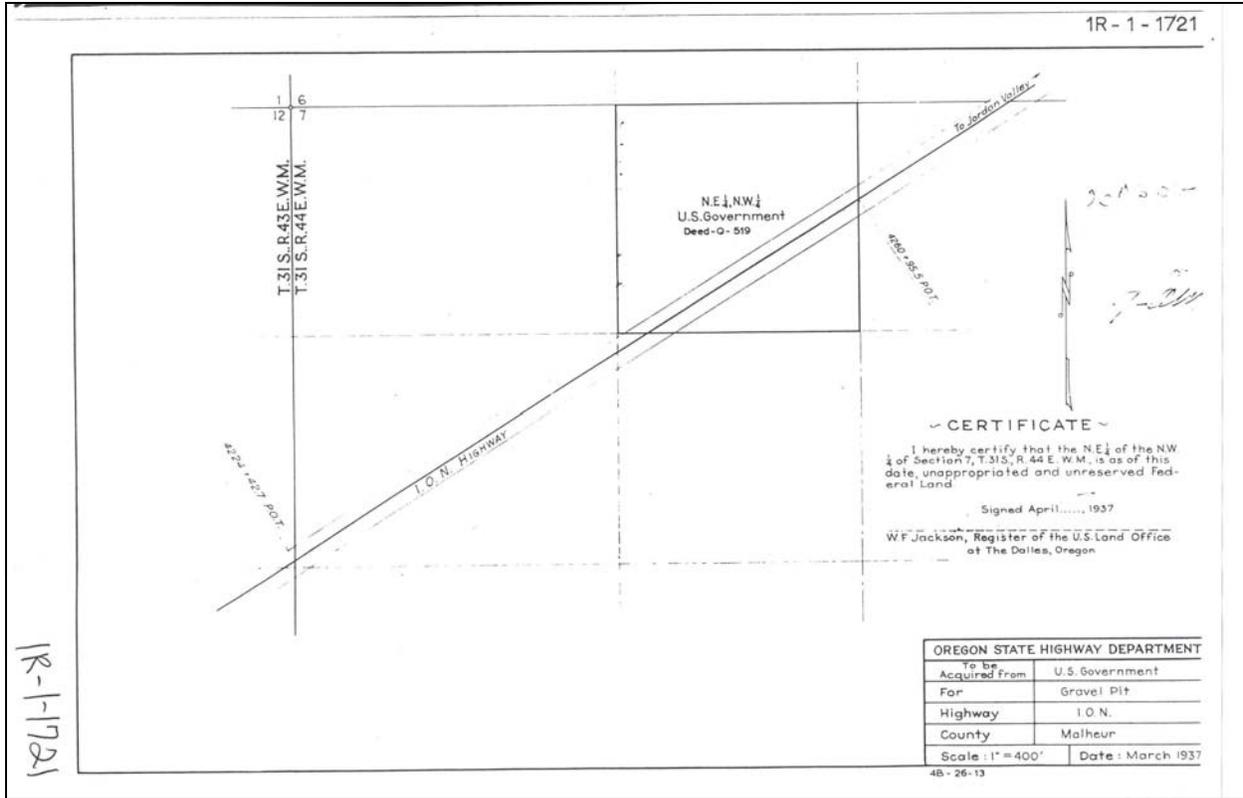
View of the area around the site that is under water in Brownlee Reservoir.



County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur				14	0456	0	31S	44.0E	07
File ID		Source #	Date Visited	Map #			Type of Site		
Q0519		23-903-5	06/28/2001	1R-1-1721			Raw Land		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
42 52'55.25000"	117 23'04.29000"	4286	40	NA					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
Volcanic Gravel	Ts	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Poor			NA	120	160,000	259,200			
Potentially Significant Site	Why			Open/Closed	Direction				
No	USA Ground			Closed	NA				
Adjacent Land Use									
Open Space									
Remarks									
Highway 95 bisects the property. Site 23-070-5 is adjacent to the north. The majority of the material is sand/silt with a small percentage of pebbles. There is no screening from the highway.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									



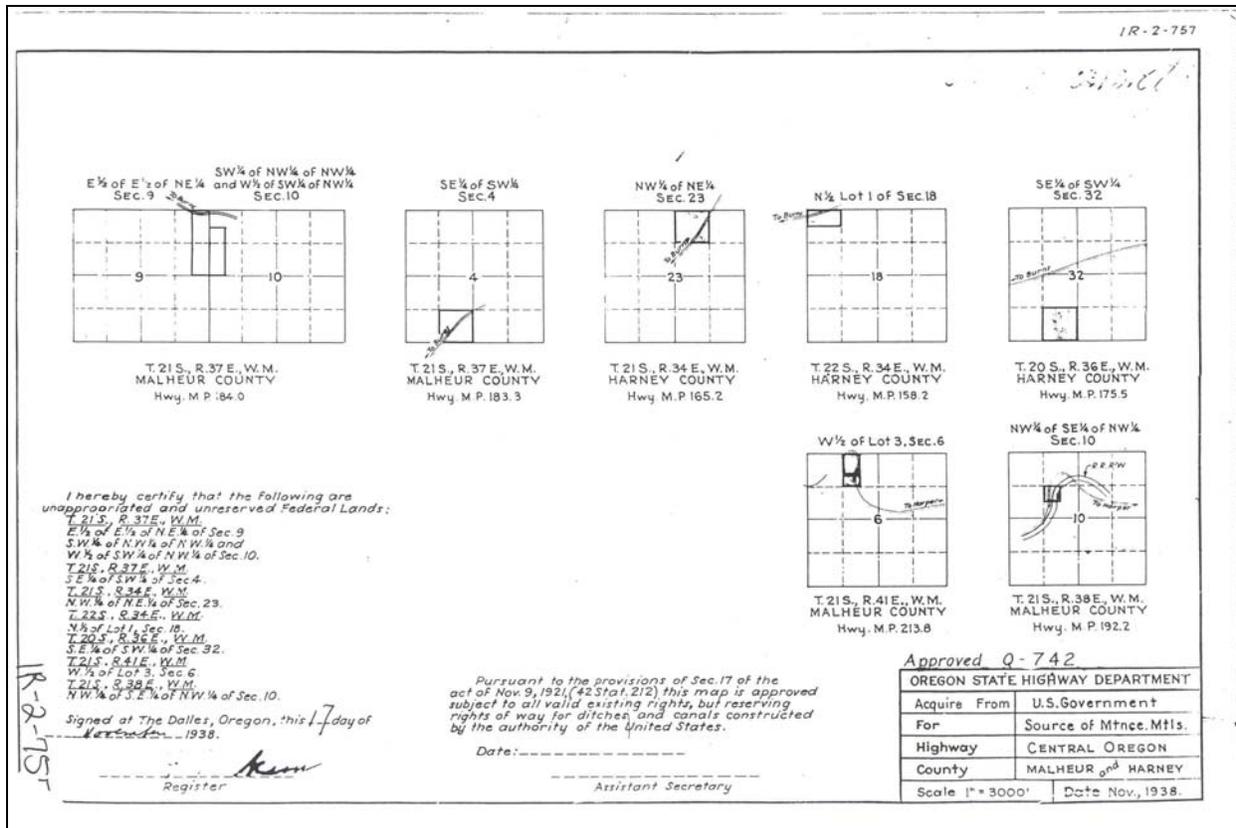
Aerial view of the raw land site located north of Highway 95. Note that site, 23-070-5, borders it to the north.



County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur					14	0007	165	21S	37.0E	9, 10
File ID		Source #	Date Visited	Map #			Type of Site			
13300, Q0742		23-906-5	08/14/2001	1R-2-757			Raw Land			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
43 46'17.10000"	118 10'27.09000"	1035	70	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color	Weathering		Jointing					
Pyroclastics	Tif	NA	NA		NA					
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Unknown			NA	120						
Potentially Significant Site	Why			Open/Closed	Direction					
No	USA Ground			Closed	NA					
Adjacent Land Use										
Open Space										
Remarks										
This site is adjacent to and south of Highway 20. The gate was locked and the road was blocked, so access was denied. From the exposures along the highway, the lithology of the area consists of laid Tuffs of very poor quality. There are basalt flows in the area and could be at the top of the quarry site. From an aerial photo there appears to be a small pit on top of the hill.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



View of the raw land site looking across Highway 20.



Aerial view of the raw land site located south of Highway 20.

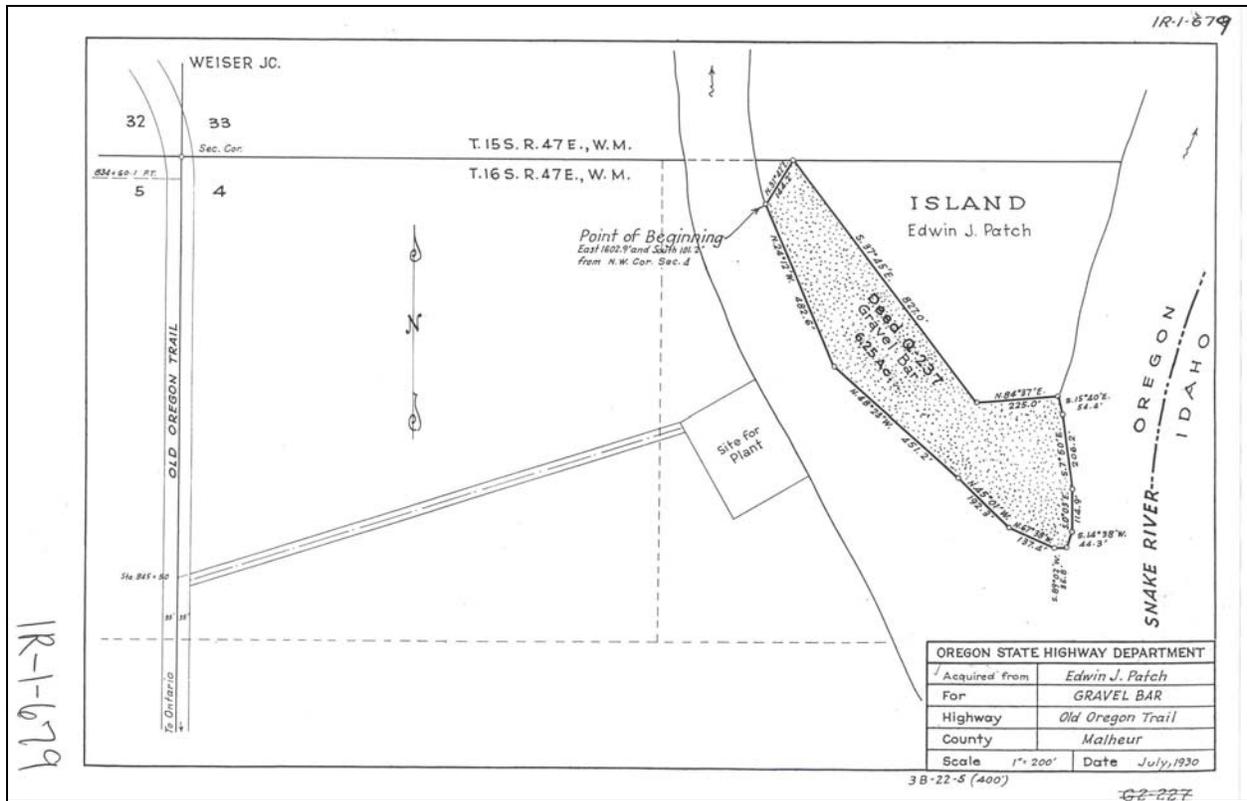
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur				14	0006	12	16S	47.0E	04
File ID		Source #	Date Visited	Map #			Type of Site		
Q0237		23-908-5	06/07/2001	1R-1-679			Raw Land		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
44 12'45.41000"	116 58'36.04000"	642	6.25	NA					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color		Weathering			Jointing		
NA	Qal	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
NA			NA	120					
Potentially Significant Site	Why			Open/Closed	Direction				
NA	NA			NA	Island in the Snake River				
Adjacent Land Use									
NA									
Remarks									
This leased site is located on the southern tip of an island in the middle of the Snake River. There is no access to the ground.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

NE

S



View of the site located on an island in the middle of the Snake River.



Aerial view of the site located on an island in the Snake River.

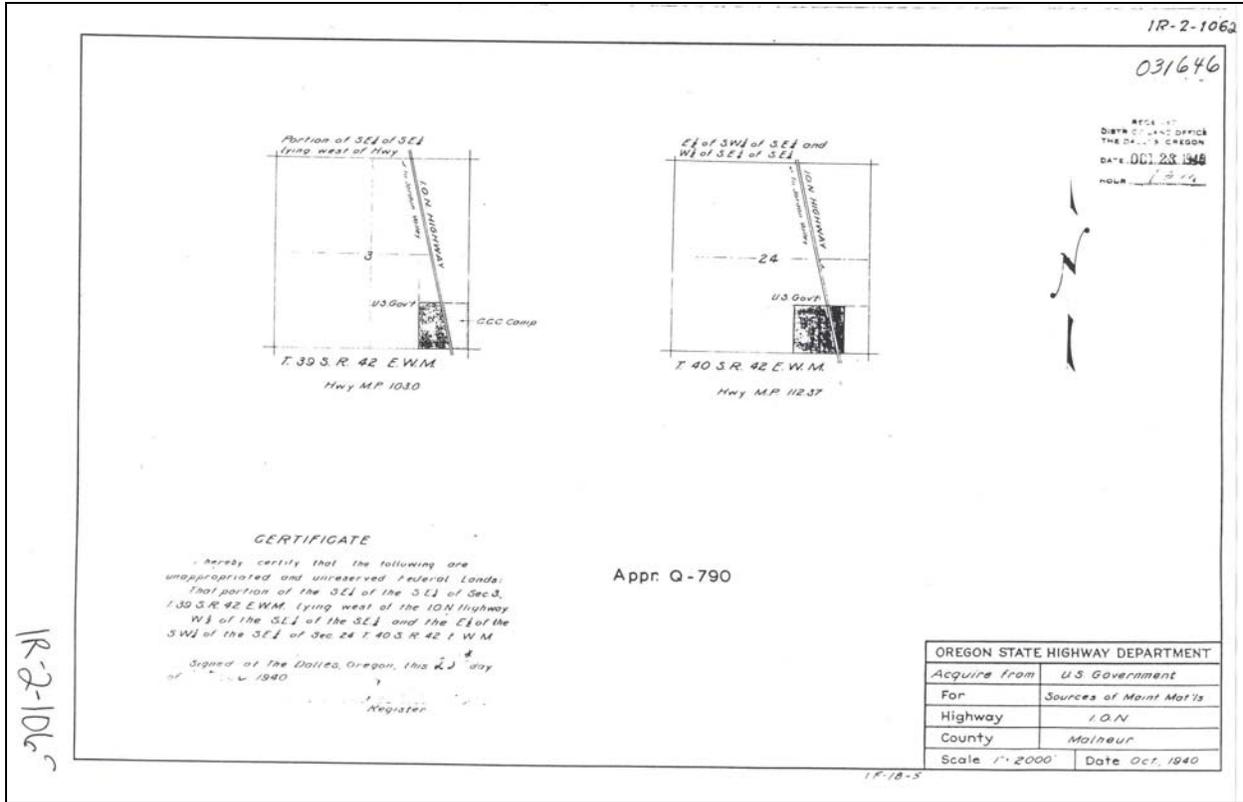
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur					14	0456	0	39S	42.0E	03
File ID		Source #	Date Visited	Map #			Type of Site			
12256		23-913-5	07/17/2001	1R-2-1545, 1R-2-1062			Borrow			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42 12'29.86665"	117 46'08.33791"	1448.101	40	<40						
Comments										
GPS acquired in the pit										
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	645,000	1,044,900				
Potentially Significant Site	Why			Open/Closed	Direction					
No	USA Ground			Closed	NA					
Adjacent Land Use										
Open Space										
Remarks										
Highway 95 bisects this ground north of McDermitt. The material at this location is composed of volcanic gravel that is cobble size and less (50%) and sand/silt (50%). The terrain is flat with no screening from the highway and ample room to work. There are multiple pits of varying sizes that occupy both sides of the highway.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



360° view of the borrow site located north of McDermitt.



Close-up view of the material at the site.



Aerial view of the borrow site near McDermitt.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur				14	0456	0	38S	42.0E	22
File ID		Source #	Date Visited	Map #			Type of Site		
12256		23-914-5	07/17/2001	1R-2-1545			Raw Land		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
42 15'31.15000"	117 47'02.49000"	1466	10	NA					
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)			
Unknown			NA	120	160,000	259,200			
Potentially Significant Site	Why			Open/Closed	Direction				
No	USA Ground			Closed	NA				
Adjacent Land Use									
Open Space									
Remarks									
Highway 95 bisects the ground south of the Blue Mountain Summit. This is raw land with no prior disturbance. The terrain is flat with no screening from the highway. There is no evidence of bed rock and no good exposures of gravel to deduce any good information.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

SE

SW



View of the raw land site along Highway 95 south of the Blue Mountain Summit.

1R-2-1545

Q-1035

SE 1/4 of NW 1/4 of SE 1/4
Sec. 26

5B-29-23

T 39 S, R 42 E, W.M.
Malheur County
Hwy MP 870

SE 1/4 of SE 1/4
Sec. 3

5B-29-23

T 39 S, R 42 E, W.M.
Malheur County
Hwy MP 850
*Portion west of Highway
approved May 3, 1945
The Dalles 03144*

NE 1/4 of NW 1/4 of SW 1/4
Sec. 22

5B-29-23

T 30 S, R 42 E, W.M.
Malheur County
Hwy MP 986

NE 1/4 of SE 1/4 of SE 1/4
Sec. 32

5B-29-22

T 37 S, R 42 E, W.M.
Malheur County
Hwy MR 552

SE 1/4 of NE 1/4
Sec. 50

5B-29-22

T 37 S, R 42 E, W.M.
Malheur County
Hwy MP 855

SE 1/4 of SW 1/4
Sec. 18

5B-29-22

T 37 S, R 42 E, W.M.
Malheur County
Hwy MP 520

NE 1/4 of SE 1/4 of NE 1/4
Sec. 35

5B-29-22

T 35 S, R 39 E, W.M.
Malheur County
Hwy MP 845

I hereby certify that the following are unappropriated and unreserved Federal Lands; except that they are in the hands of the U.S. Forest Service, which is a (R) (N) (C) (D) (E) (F) (G) (H) (I) (J) (K) (L) (M) (N) (O) (P) (Q) (R) (S) (T) (U) (V) (W) (X) (Y) (Z) (AA) (AB) (AC) (AD) (AE) (AF) (AG) (AH) (AI) (AJ) (AK) (AL) (AM) (AN) (AO) (AP) (AQ) (AR) (AS) (AT) (AU) (AV) (AW) (AX) (AY) (AZ) (BA) (BB) (BC) (BD) (BE) (BF) (BG) (BH) (BI) (BJ) (BK) (BL) (BM) (BN) (BO) (BP) (BQ) (BR) (BS) (BT) (BU) (BV) (BW) (BX) (BY) (BZ) (CA) (CB) (CC) (CD) (CE) (CF) (CG) (CH) (CI) (CJ) (CK) (CL) (CM) (CN) (CO) (CP) (CQ) (CR) (CS) (CT) (CU) (CV) (CW) (CX) (CY) (CZ) (DA) (DB) (DC) (DD) (DE) (DF) (DG) (DH) (DI) (DJ) (DK) (DL) (DM) (DN) (DO) (DP) (DQ) (DR) (DS) (DT) (DU) (DV) (DW) (DX) (DY) (DZ) (EA) (EB) (EC) (ED) (EE) (EF) (EG) (EH) (EI) (EJ) (EK) (EL) (EM) (EN) (EO) (EP) (EQ) (ER) (ES) (ET) (EU) (EV) (EW) (EX) (EY) (EZ) (FA) (FB) (FC) (FD) (FE) (FF) (FG) (FH) (FI) (FJ) (FK) (FL) (FM) (FN) (FO) (FP) (FQ) (FR) (FS) (FT) (FU) (FV) (FW) (FX) (FY) (FZ) (GA) (GB) (GC) (GD) (GE) (GF) (GG) (GH) (GI) (GJ) (GK) (GL) (GM) (GN) (GO) (GP) (GQ) (GR) (GS) (GT) (GU) (GV) (GW) (GX) (GY) (GZ) (HA) (HB) (HC) (HD) (HE) (HF) (HG) (HH) (HI) (HJ) (HK) (HL) (HM) (HN) (HO) (HP) (HQ) (HR) (HS) (HT) (HU) (HV) (HW) (HX) (HY) (HZ) (IA) (IB) (IC) (ID) (IE) (IF) (IG) (IH) (II) (IJ) (IK) (IL) (IM) (IN) (IO) (IP) (IQ) (IR) (IS) (IT) (IU) (IV) (IW) (IX) (IY) (IZ) (JA) (JB) (JC) (JD) (JE) (JF) (JG) (JH) (JI) (JJ) (JK) (JL) (JM) (JN) (JO) (JP) (JQ) (JR) (JS) (JT) (JU) (JV) (JW) (JX) (JY) (JZ) (KA) (KB) (KC) (KD) (KE) (KF) (KG) (KH) (KI) (KJ) (KK) (KL) (KM) (KN) (KO) (KP) (KQ) (KR) (KS) (KT) (KU) (KV) (KW) (KX) (KY) (KZ) (LA) (LB) (LC) (LD) (LE) (LF) (LG) (LH) (LI) (LJ) (LK) (LL) (LM) (LN) (LO) (LP) (LQ) (LR) (LS) (LT) (LU) (LV) (LW) (LX) (LY) (LZ) (MA) (MB) (MC) (MD) (ME) (MF) (MG) (MH) (MI) (MJ) (MK) (ML) (MM) (MN) (MO) (MP) (MQ) (MR) (MS) (MT) (MU) (MV) (MW) (MX) (MY) (MZ) (NA) (NB) (NC) (ND) (NE) (NF) (NG) (NH) (NI) (NJ) (NK) (NL) (NM) (NN) (NO) (NP) (NQ) (NR) (NS) (NT) (NU) (NV) (NW) (NX) (NY) (NZ) (OA) (OB) (OC) (OD) (OE) (OF) (OG) (OH) (OI) (OJ) (OK) (OL) (OM) (ON) (OO) (OP) (OQ) (OR) (OS) (OT) (OU) (OV) (OW) (OX) (OY) (OZ) (PA) (PB) (PC) (PD) (PE) (PF) (PG) (PH) (PI) (PJ) (PK) (PL) (PM) (PN) (PO) (PP) (PQ) (PR) (PS) (PT) (PU) (PV) (PW) (PX) (PY) (PZ) (QA) (QB) (QC) (QD) (QE) (QF) (QG) (QH) (QI) (QJ) (QK) (QL) (QM) (QN) (QO) (QP) (QQ) (QR) (QS) (QT) (QU) (QV) (QW) (QX) (QY) (QZ) (RA) (RB) (RC) (RD) (RE) (RF) (RG) (RH) (RI) (RJ) (RK) (RL) (RM) (RN) (RO) (RP) (RQ) (RR) (RS) (RT) (RU) (RV) (RW) (RX) (RY) (RZ) (SA) (SB) (SC) (SD) (SE) (SF) (SG) (SH) (SI) (SJ) (SK) (SL) (SM) (SN) (SO) (SP) (SQ) (SR) (SS) (ST) (SU) (SV) (SW) (SX) (SY) (SZ) (TA) (TB) (TC) (TD) (TE) (TF) (TG) (TH) (TI) (TJ) (TK) (TL) (TM) (TN) (TO) (TP) (TQ) (TR) (TS) (TT) (TU) (TV) (TW) (TX) (TY) (TZ) (UA) (UB) (UC) (UD) (UE) (UF) (UG) (UH) (UI) (UJ) (UK) (UL) (UM) (UN) (UO) (UP) (UQ) (UR) (US) (UT) (UU) (UV) (UW) (UX) (UY) (UZ) (VA) (VB) (VC) (VD) (VE) (VF) (VG) (VH) (VI) (VJ) (VK) (VL) (VM) (VN) (VO) (VP) (VQ) (VR) (VS) (VT) (VU) (VV) (VW) (VX) (VY) (VZ) (WA) (WB) (WC) (WD) (WE) (WF) (WG) (WH) (WI) (WJ) (WK) (WL) (WM) (WN) (WO) (WP) (WQ) (WR) (WS) (WT) (WU) (WV) (WW) (WX) (WY) (WZ) (XA) (XB) (XC) (XD) (XE) (XF) (XG) (XH) (XI) (XJ) (XK) (XL) (XM) (XN) (XO) (XP) (XQ) (XR) (XS) (XT) (XU) (XV) (XW) (XX) (XY) (XZ) (YA) (YB) (YC) (YD) (YE) (YF) (YG) (YH) (YI) (YJ) (YK) (YL) (YM) (YN) (YO) (YP) (YQ) (YR) (YS) (YT) (YU) (YV) (YW) (YX) (YZ) (ZA) (ZB) (ZC) (ZD) (ZE) (ZF) (ZG) (ZH) (ZI) (ZJ) (ZK) (ZL) (ZM) (ZN) (ZO) (ZP) (ZQ) (ZR) (ZS) (ZT) (ZU) (ZV) (ZW) (ZX) (ZY) (ZZ)

Signed at The Dalles, Oregon, this 21st day of August 1945

Register

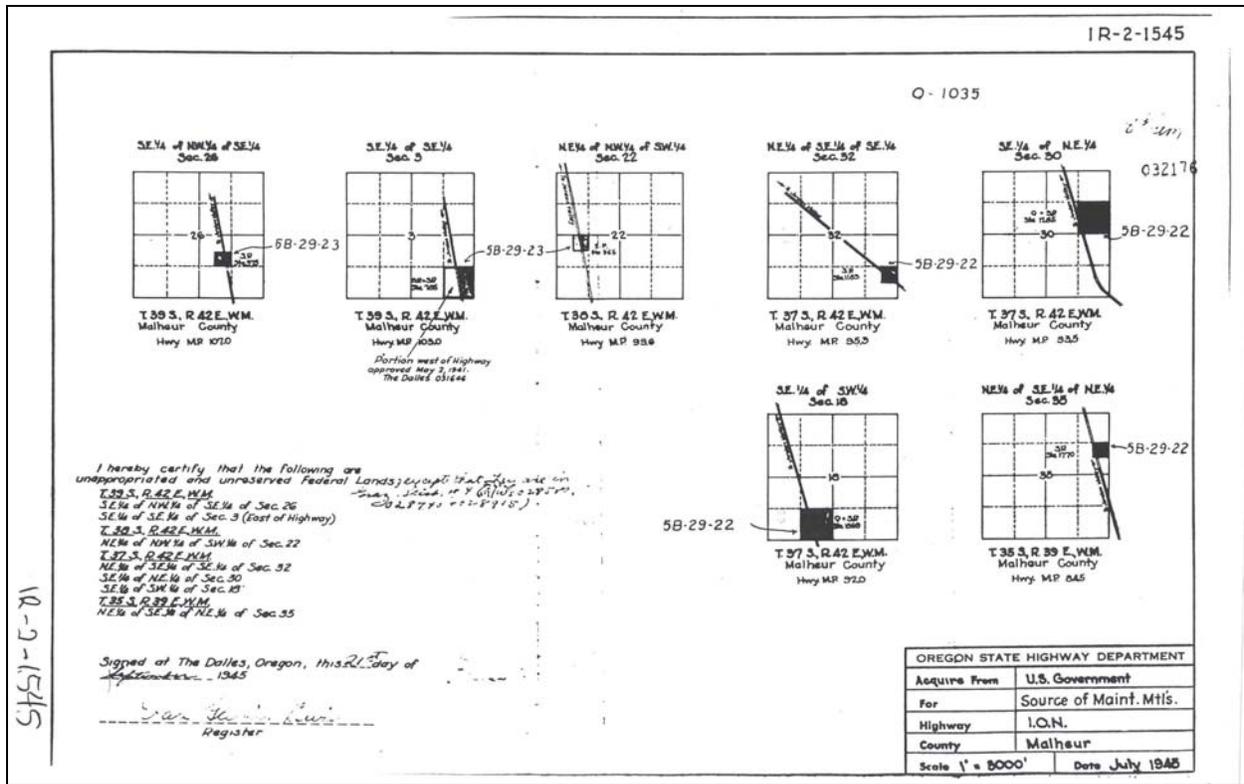
OREGON STATE HIGHWAY DEPARTMENT	
Acquire From	U.S. Government
For	Source of Maint. Mtlis.
Highway	I.O.N.
County	Malheur
Scale	1" = 8000'
Date	July 1945

1R-2-1545

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur				14	0456	0	37S	42.0E	32
File ID		Source #	Date Visited	Map #			Type of Site		
12256		23-915-5	07/17/2001	1R-2-1545			Raw Land		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
42 18'46.64000"	117 48'32.35000"	1585	10	NA					
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)			
NA			NA	120	160,000	259,200			
Potentially Significant Site	Why			Open/Closed	Direction				
No	USA Ground			NA	NA				
Adjacent Land Use									
Open Space									
Remarks									
Highway 95 bisects this ground just south of the Blue Mountain Summit. This is raw land with no prior disturbance. The site is located on an alluvial fan and the material would be composed of volcanic colluvium. The terrain is flat. Unknown quality and percentage of usable gravel.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

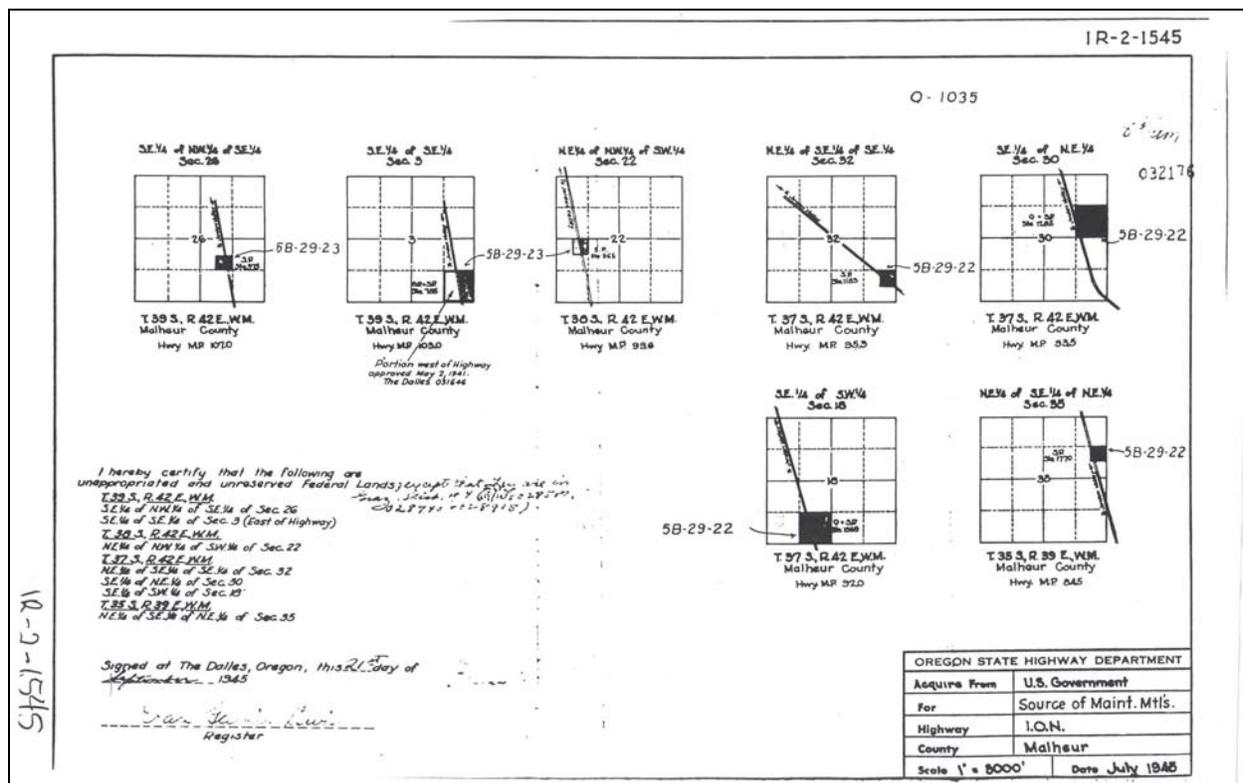


View of the raw land site just south of the Blue Mountain Summit on Highway 95.



Aerial view of the raw land site on Highway 95.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur				14	0456	0	37S	42.0E	30
File ID		Source #	Date Visited	Map #			Type of Site		
12256		23-916-5	07/31/2001	1R-2-1545			Raw Land		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
42 20'01.74000"	117 49'45.75000"	1574	40	NA					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type		Unit	Color	Weathering			Jointing		
Volcanic Colluvium		Qt	NA	NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Poor			NA	120	320,000	518,400			
Potentially Significant Site	Why			Open/Closed	Direction				
No	USA Ground			Closed	NA				
Adjacent Land Use									
Open Space									
Remarks									
This site is located east of and adjacent to Highway 95. The material is composed of volcanic gravel and silt/sand mix, of poor quality. The terrain is fairly flat with no screening from the highway.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									



NO SITE MAP AVAILABLE

NO AERIAL PHOTO AVAILABLE

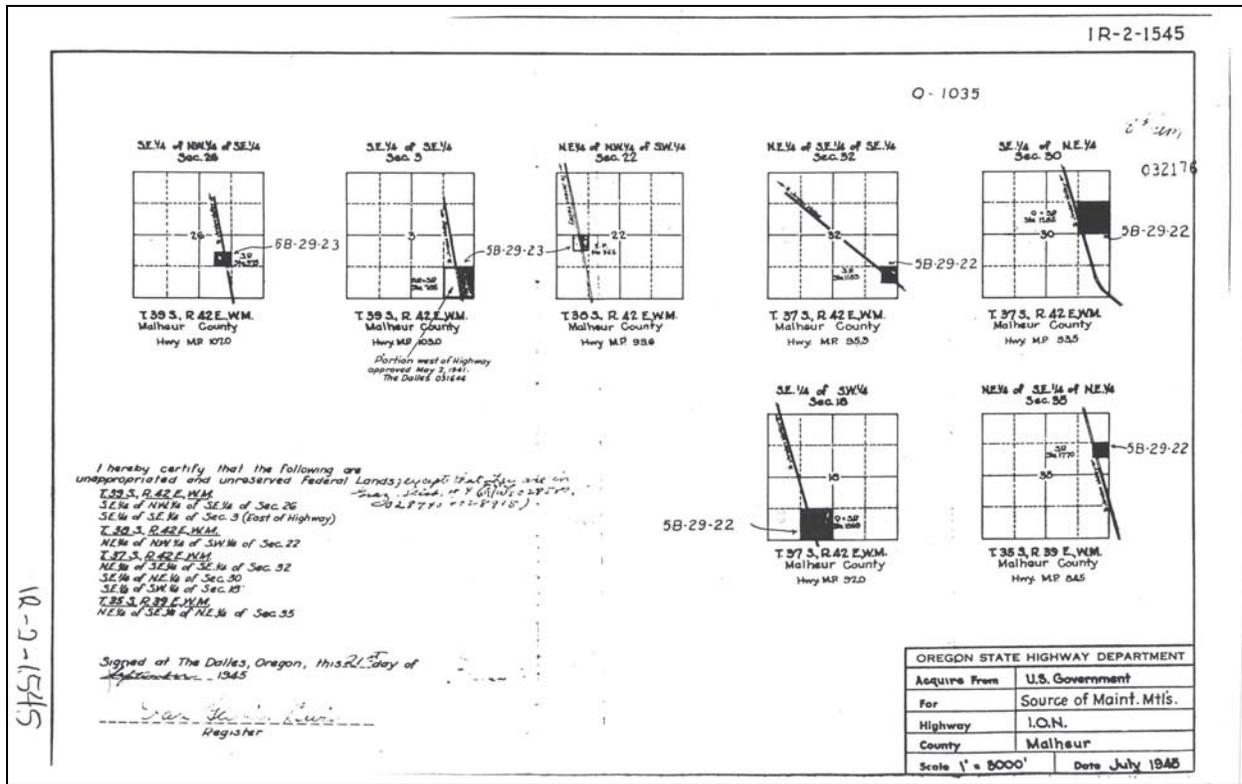
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur				14	0456	0	37S	42.0E	18
File ID		Source #	Date Visited	Map #			Type of Site		
12256		23-917-5	07/17/2001	1R-2-1545			Quarry		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
42 21'19.08057"	117 50'23.21612"	1483.518	40	<1					
Comments									
GPS acquired in the pit									
Rock Type	Unit	Color		Weathering			Jointing		
Basalt	Tba	Medium Dark Grey (N4)		Slight to Moderate			Highly Fractured to Massive		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Fair to Poor			R2 to R3	117	484,000	764,478			
Potentially Significant Site	Why			Open/Closed	Direction				
No	USA Ground			Closed	NA				
Adjacent Land Use									
Open Space									
Remarks									
This site is located east of and adjacent to Highway 95. The rock is a fine-grain highly fractured basalt. There is a wide range of variability within this flow. Certain parts have a high percentage of voids (less than 80%) that reduce the specific gravity and some sections have moderate weathering. If you rip the material you will obtain a high percentage of rip rap. This would lead to the process of drilling and blasting the rock to control aggregate size. The terrain is moderate, around 15 degrees with no screening and limited room to work. All work should proceed from the top down. 15,000 cubic yards have been removed.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									



View of the quarry site along Highway 95.



Close-up view of the basalt at this site, note the hammer for scale.



Aerial view of the quarry site along Highway 95.

NO SITE PHOTO AVAILABLE

NO AERIAL PHOTO AVAILABLE

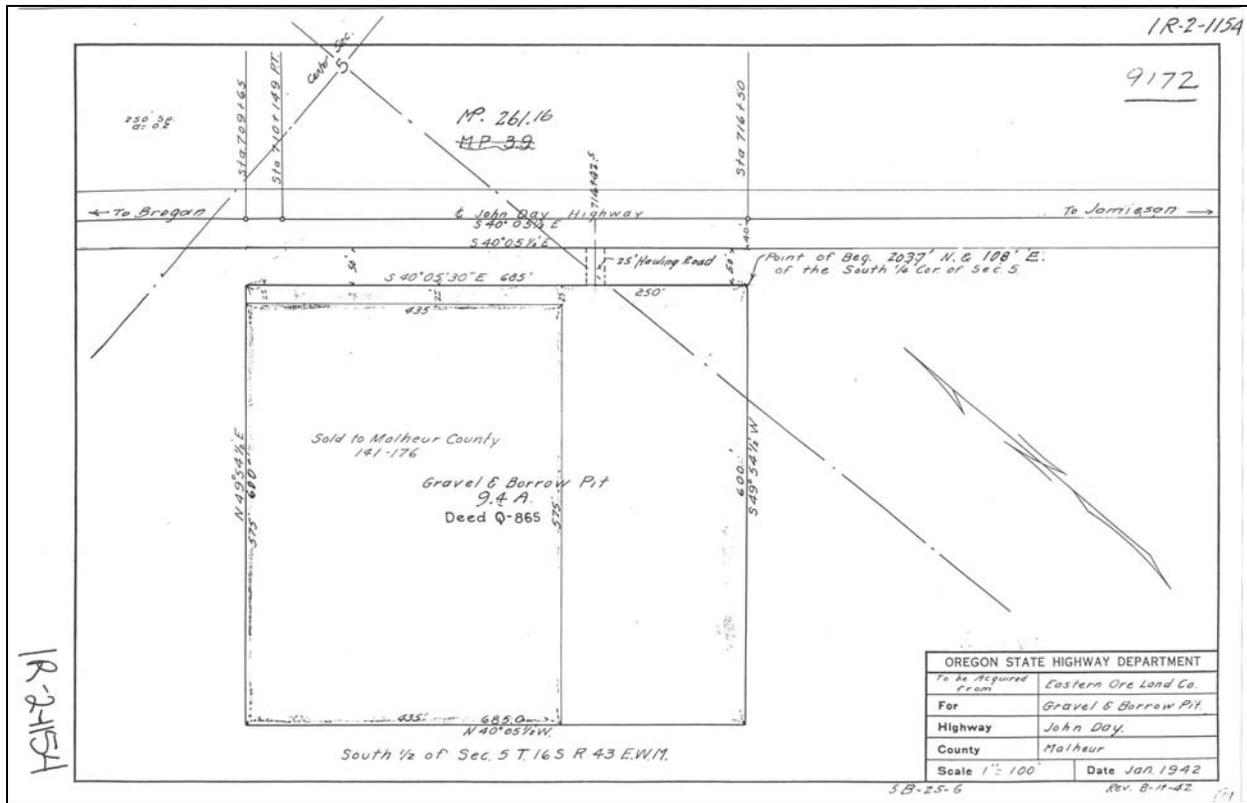
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur				14	0005	258	16S	43.0E	05
File ID		Source #	Date Visited	Map #			Type of Site		
09172, 09172A		23-926-5	06/06/2001	1R-2-1154			Raw Land		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
44 12'23.77290"	117 28'41.47376"	771.899	3.66	NA					
Comments									
GPS acquired at access road.									
Rock Type	Unit	Color		Weathering			Jointing		
Volcanic Gravel	Ts	NA		NA			NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Fair			NA	120	95,000	153,900			
Potentially Significant Site	Why			Open/Closed	Direction				
No	Too Small			Closed	NA				
Adjacent Land Use									
Farming									
Remarks									
This site is adjacent to and southwest of Highway 26. The ground has no prior disturbance. The adjacent farmer uses the ground for access to his fields and a dumping ground for organic debris. We sold the adjacent ground to the county for a transfer station. The material at this location is composed of cobble size (15%) and less, sand/silt (85%). The terrain is fairly flat with no screening.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

NE

SE



View of the raw land site adjacent to and southeast of Highway 26.



Aerial view of the raw land site located southwest of Highway 26 and adjacent to a county transfer station.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur				14	0456	13.20	28S	46.0E	35
File ID		Source #	Date Visited	Map #			Type of Site		
10518		23-927-5	06/27/201	1R-2-1310			Borrow		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
43 04'31.84089"	117 03'39.06616"	1437.875	50	<4					
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)			
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 located east of Highway 95 about 300 meters. The material is composed of volcanic gravel, cobble size and less (40%) and sand/silt (60%). There is good screening with ample room to work. The terrain is gradual and should help to screen the pit.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

E

NE



View of the borrow site.



Close-up view of the aggregate at this site.

1R-2-1310

T. 28 S., R. 46 E. W.M.
SE $\frac{1}{4}$ SW $\frac{1}{4}$ and W $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$

+ CERTIFICATE +

I hereby certify that the SE $\frac{1}{4}$ of SW $\frac{1}{4}$ and W $\frac{1}{2}$ of SW $\frac{1}{4}$ of SE $\frac{1}{4}$ of Sec. 35, T. 28 S., R. 46 E. W.M. are, as of this date, unappropriated and unreserved Federal Lands.

Signed at The Dalles, Oregon this... day of..... 1942

W. F. Jacob
Register

OREGON STATE HIGHWAY DEPARTMENT	
Acquire from	U.S. Government
For	GRAVEL PIT
Highway	Idaho, Oregon, Nevada
County	Malheur
Scale: 4" = 1 Mi.	Date: July, 1942

1R-2-1310



Aerial view of the borrow site about 300 meters east of Highway 95.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur					14	0456	0	31S	44.0E	05
File ID		Source #	Date Visited	Map #			Type of Site			
10957		23-929-5	07/21/2001	1R-2-1360			Raw Land			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42 53'45.17000"	117 21'06.34000"	1335	10	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
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	160,000	259,200				
Potentially Significant Site	Why			Open/Closed	Direction					
No	USA Ground			Closed	NA					
Adjacent Land Use										
Open Space										
Remarks										
This site is bisected by Highway 95. The material is composed of small pebble size and less volcanic gravel (40%) and sand/silt (60%). There is a thin basaltic andesite flow that caps certain ground in this vicinity. The terrain is fairly flat, with no screening from the highway.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

SE

NW



View of the raw land site bisected by Highway 95.



Close-up view of the ground at this property.

IR-2-1360



E 1/2 SW 1/4 Sec 6
T 31 S, R 44 E W.M



SW 1/4 NE 1/4 Sec 5
T 31 S, R 44 E W.M

31275

To Be Retained
 To Be Relinquished
Relinquished 6-15-83

- CERTIFICATE -

I hereby certify that the following are unappropriated and unreserved Federal Lands

T 31 S, R 44 E W.M - E 1/2 of SW 1/4 Sec 6
SW 1/2 of NE 1/4 Sec 5

Signed at The Dalles, Oregon this 15 day of June, 1943

Register

Q-903

OREGON STATE HIGHWAY DEPARTMENT	
Acquired from	U. S. GOVERNMENT
For	MATERIAL SITES
Highway	J. O. N.
County	MALHEUR
Scale: 1" = 2000'	Date: June, 1943
48-26-D	Rev. June, 1983

IR-2-1360



Aerial view of the raw land site bisected by Highway 95.

County	Site Name	Dist	Hwy	Mile Pt	TWP	RGE	Sect	
Malheur		14	0442	0	29S	37.0E	22, 23	
File ID		Source #	Date Visited		Map #		Type of Site	
13492		23-932-5	08/01/2001		1R-2-1701		Borrow	
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #			
43 02'03.13000"	118 09'04.44000"	1273	120	<13				
Comments								
Lat. and Long. acquired using Terrain Navigator Software								
Rock Type	Unit	Color		Weathering		Jointing		
Volcanic Colluvium	Qs	NA		NA		NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)		
Fair			NA	120	800,000	1,296,000		
Potentially Significant Site	Why			Open/Closed	Direction			
No	USA Ground/ Division of State Lands			Closed	NA			
Adjacent Land Use								
Open Space								
Remarks								
Highway 78 bisects this ground. The material is composed of volcanic gravel (50%) that is small cobble size and less, and silt/sand (50%). The terrain is flat with ample room to work and no screening.								
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.
Material Use								

W

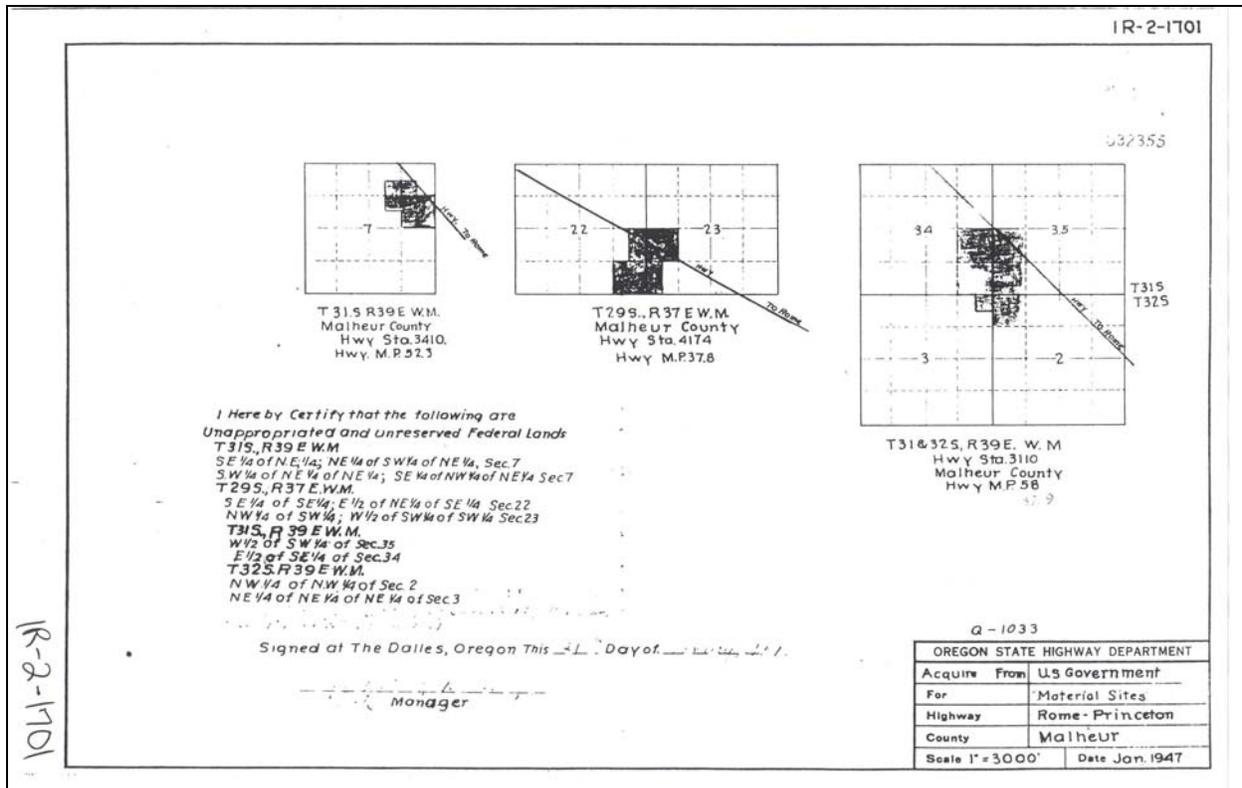
SE



View of the borrow site looking from Highway 78.



Close-up view of the aggregate at this site.



Aerial view of the borrow site bisected by Highway 78.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur					14	0456	0	31S	41.0E	34
File ID		Source #	Date Visited	Map #			Type of Site			
Q0664		23-941-5	07/10/2001	1R-2-640			Raw Land			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42 49'09.10000"	117 41'02.67000"	1109	40	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color	Weathering			Jointing				
Ash/ Volcanic Gravel	Qs	NA	NA			NA				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Poor			NA	120	645,000	1,044,900				
Potentially Significant Site	Why			Open/Closed	Direction					
No	USA Ground			NA	NA					
Adjacent Land Use										
Open Space										
Remarks										
Highway 95 bisects this site. This is raw land with no past disturbance. The material at this location is composed of 60% ash/tuff and 40% volcanic gravel with the dominant size small pebble. The terrain is gradual with numerous dry draws. There is no screening from the highway.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

NE

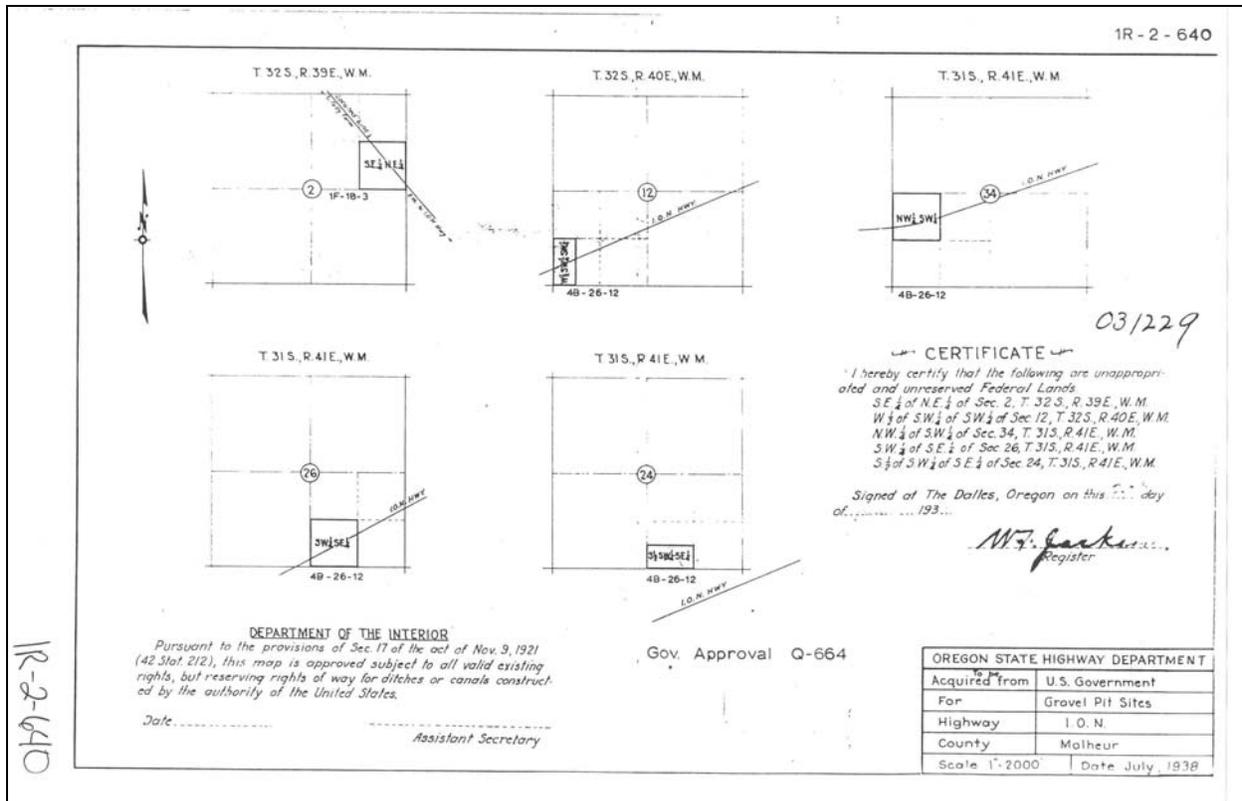
NW



View of the raw land site that is bisected by Highway 95.

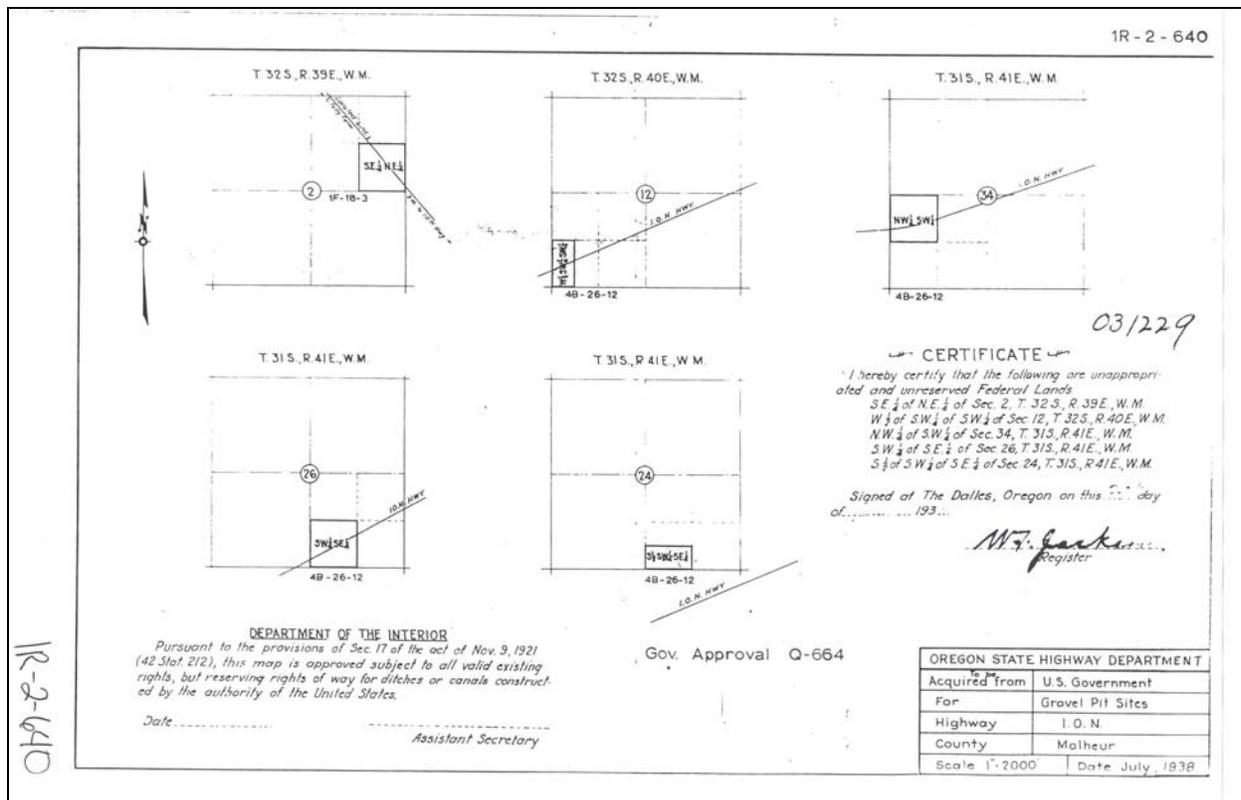


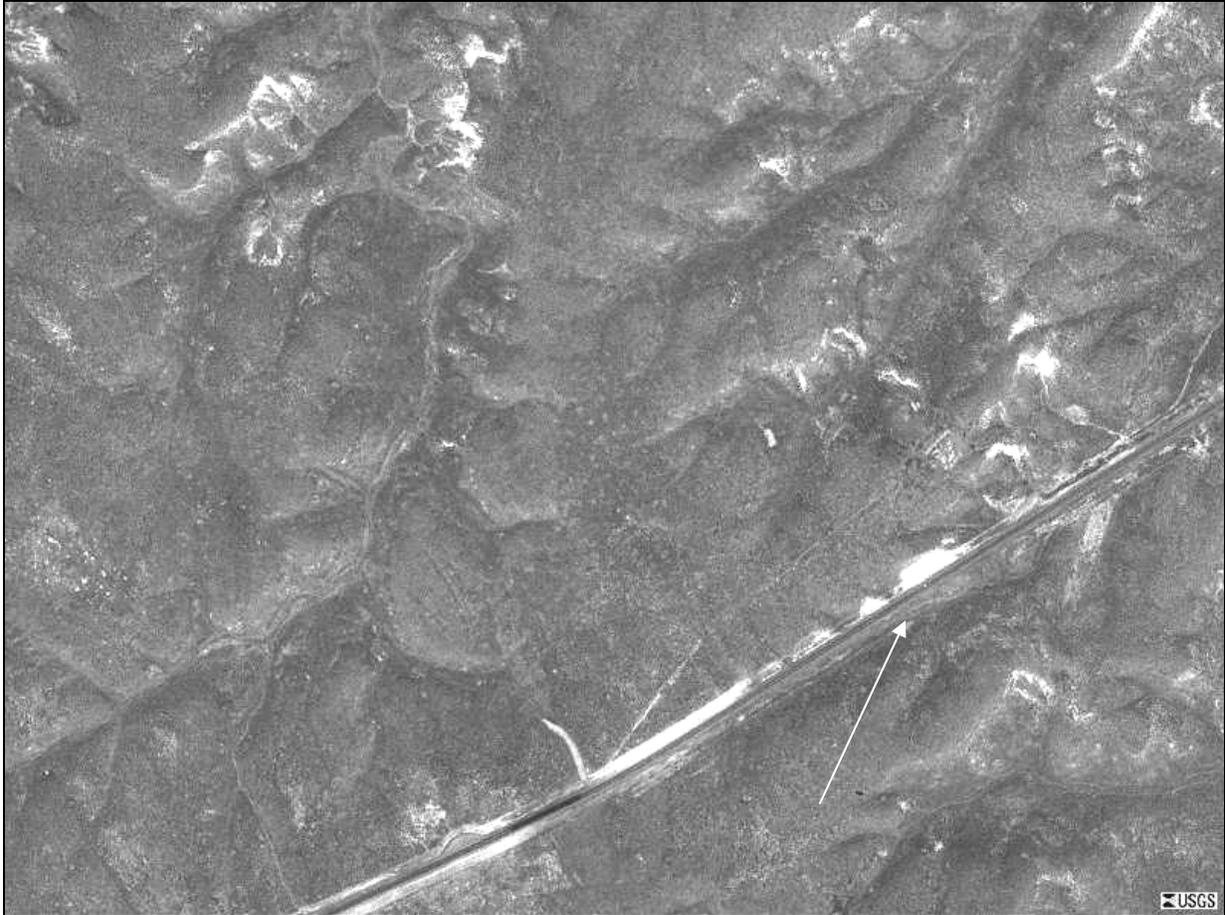
Close-up view of the material found at this site.



Aerial view of the raw land site located on either side of Highway 95.

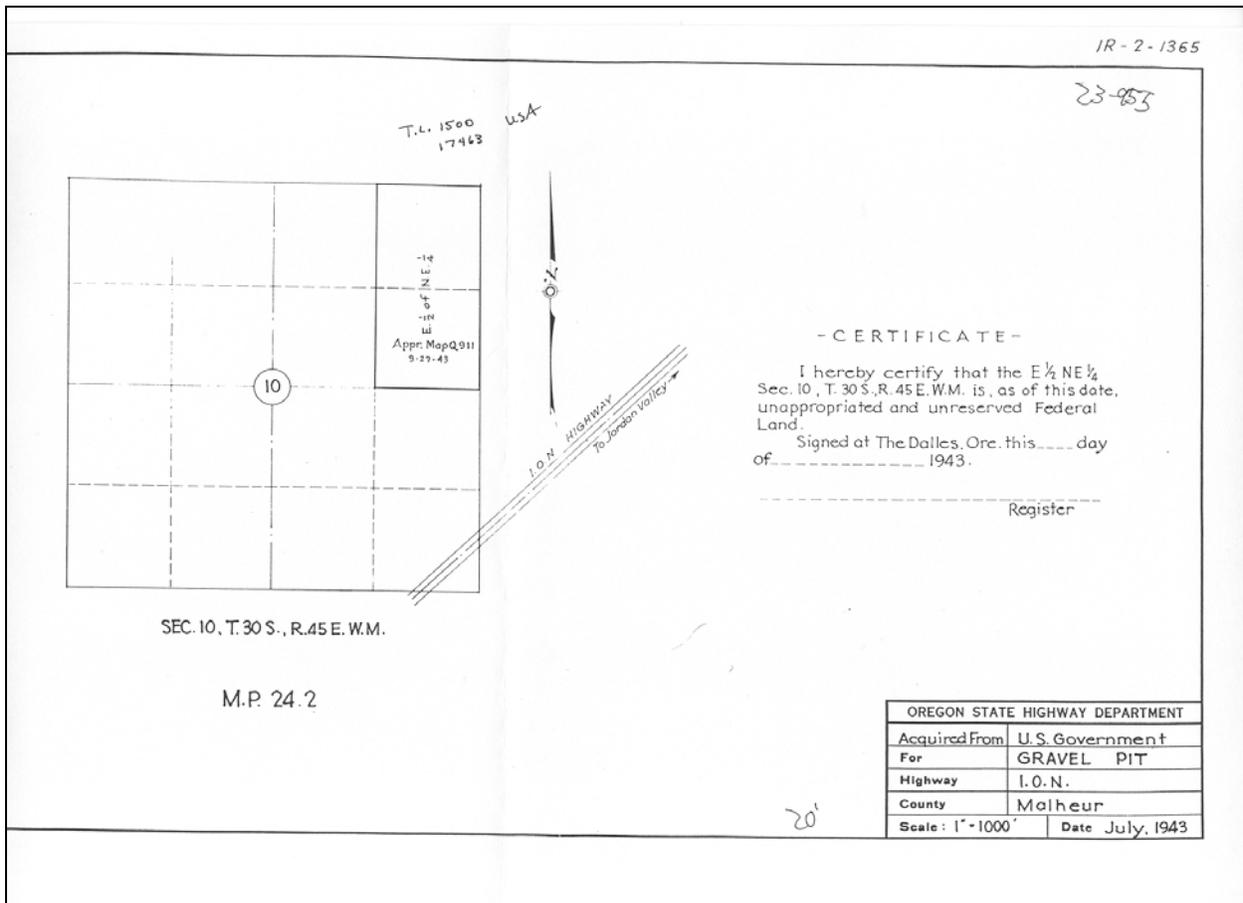
County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur					14	0456	0	31S	41.0E	26
File ID		Source #	Date Visited	Map #		Type of Site				
Q0664		23-942-5	07/31/2001	1R-2-640		Raw Land				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42 49'45.18000"	117 39'15.36000"	1097	40	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
Ash/Tuffs	Qs	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Poor			NA	120						
Potentially Significant Site	Why			Open/Closed	Direction					
No	USA Ground			Closed	NA					
Adjacent Land Use										
Open Space										
Remarks										
Highway 95 bisects this ground 1.7 miles west of Rome, OR. The material at this site is composed of Ash/ Tuff beds of poor quality. The terrain is moderate with some screening and room to work. I would not suggest the use of this material for any purpose.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										





Aerial view of the raw land site, bisected by Highway 95, located 1.7 miles west of Rome, OR.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur				14	0456	24.2	30S	45.0E	10
File ID		Source #	Date Visited	Map #			Type of Site		
NA		23-955-5	06/28/2001	1R-2-1365			Borrow		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size		DOGAMI Permit #			
42 58'13.79005"	117 11'42.04716"	1384.169	80	<5					
Comments									
GPS acquired in the pit									
Rock Type	Unit	Color	Weathering			Jointing			
Volcanic Gravel	Ts	NA	NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Fair to Poor			NA	120	1,300,000	2,106,000			
Potentially Significant Site	Why			Open/Closed	Direction				
No	USA Ground			Closed	NA				
Adjacent Land Use									
Open Space									
Remarks									
This site is located northwest of Highway 95 about 0.5 miles. The material at this location is composed of small pebbles (35%) and sand/silt (65%). Most of the gravel has a prismatic shape. This site occupies a topographic high and would have a huge quantity of material. The terrain is flat on top, with limited screening and ample room to work. Most of the material is too small to crush for construction projects.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									





Aerial view of the 80 acre borrow site located northwest of Highway 95.

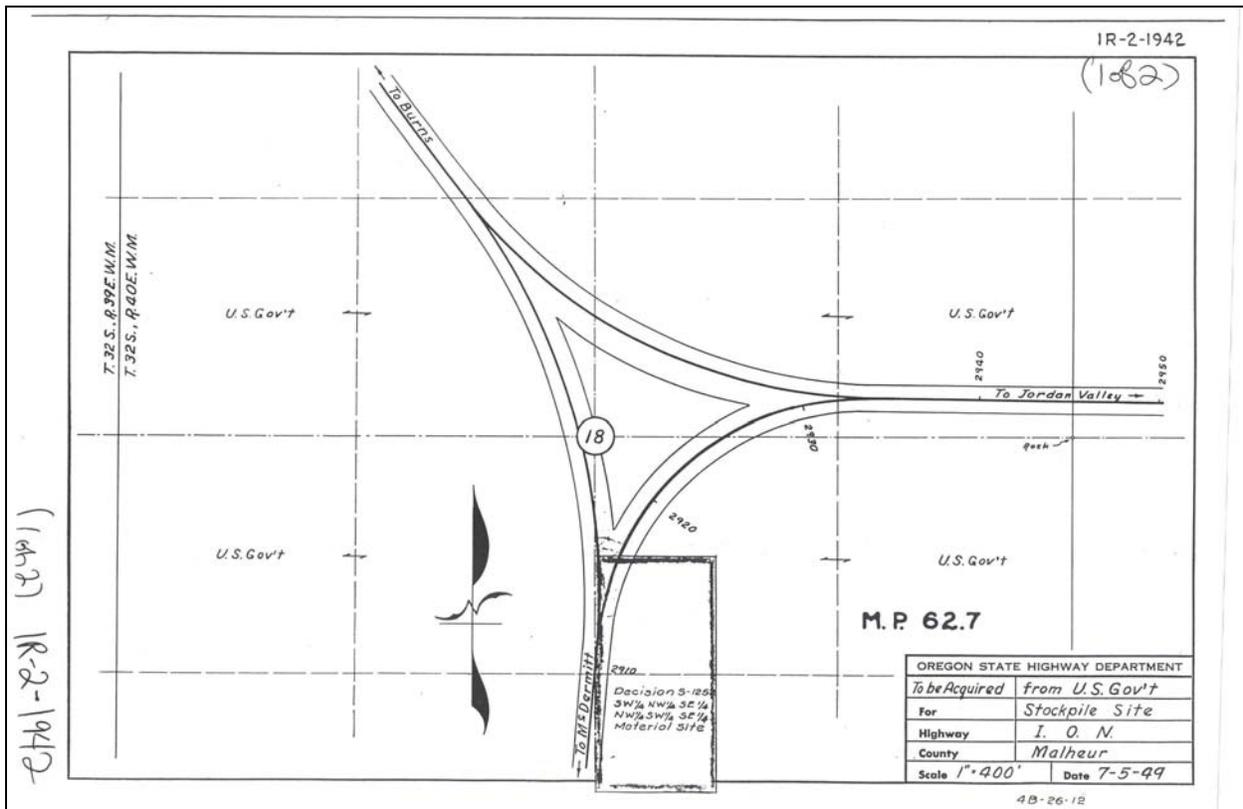
County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur				14	0456	62.7	32S	40.0E	18
File ID		Source #	Date Visited	Map #		Type of Site			
15537		23-956-5	07/10/2001	1R-2-1942		Raw Land			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #				
42 46'34.60000"	117 51'08.62000"	1196	20	NA					
Comments									
Lat. and Long. acquired using Terrain Navigator Software									
Rock Type	Unit	Color	Weathering		Jointing				
Volcanic Gravel	Qf	NA	NA		NA				
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)			
Poor			NA	120	0	0			
Potentially Significant Site	Why			Open/Closed	Direction				
No	USA Ground			Closed	NA				
Adjacent Land Use									
Open Space/Burns Junction Store									
Remarks									
This ground is located at Burns Junction. The ground is flat with no screening. The material is composed of ash/silt/sand (80%) and small gravel (20%). We have a truck scale at this location.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									

SW

SE



View of the raw land site located at Burns Junction.



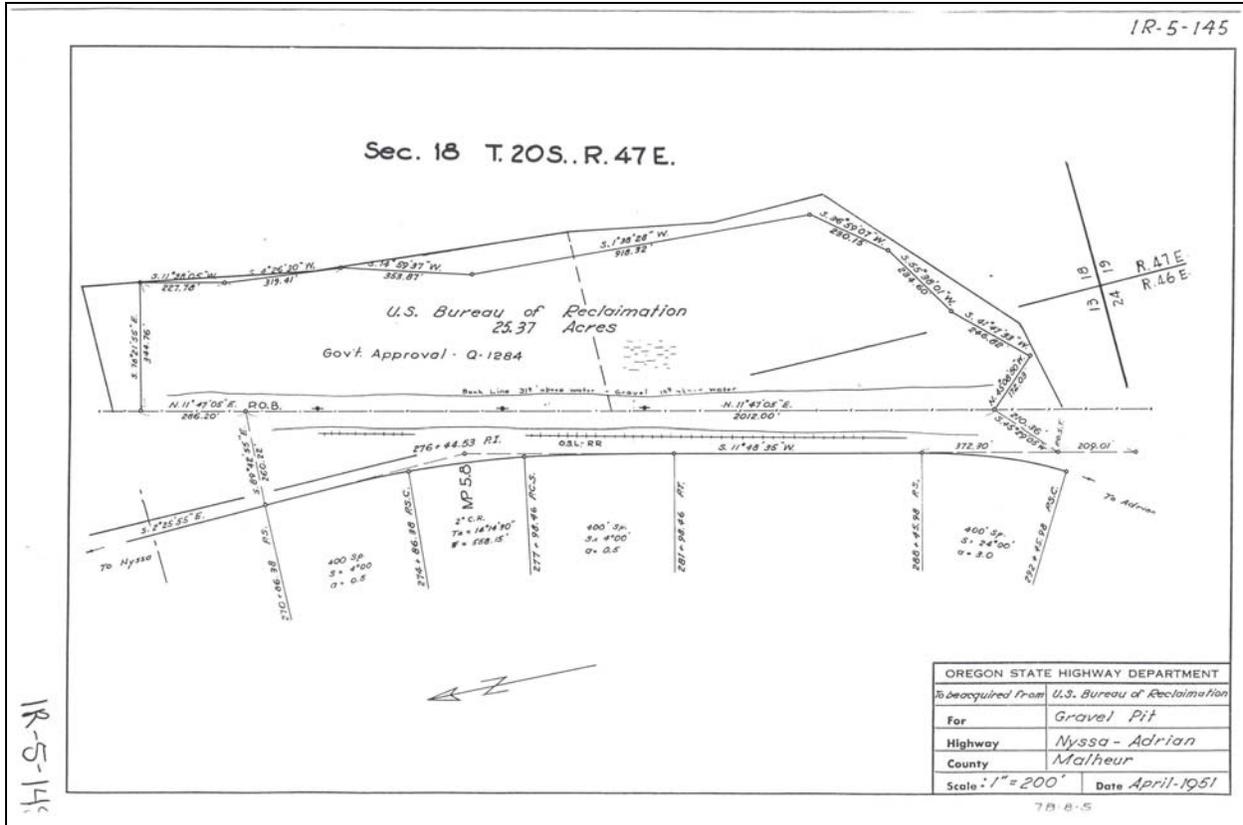


Aerial view of the raw land site at Burns Junction.

County	Site Name			Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur				14	0450	0	20S	47.0E	18
File ID		Source #	Date Visited	Map #			Type of Site		
17762		23-959-5	08/14/2001	1R-5-145			Borrow		
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #				
43 49'35.40000"	117 02'06.25000"	673	25.37	<3					
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	Owned by Bureau of Reclamation			Closed	Adjacent to the Snake River				
Adjacent Land Use									
Rural Residential/Farming									
Remarks									
This site is located east of Highway 201 about 50 meters. The site is depleted of gravel and is a mature wetland site. Wetland potential.									
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.	
Material Use									



View of the wetland site located east of Highway 201.



Aerial view of the wetland site located east of Highway 201.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur					14	0523	0	19S	41.0E	10
File ID		Source #	Date Visited	Map #		Type of Site				
30350		23-962-5	06/12/2001	1R-3-1250		Gravel				
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
43 55'29.20000"	117 40'06.46000"	852	70.13	NA						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
Volcanic Gravel	Qal	NA		NA			NA			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair to Good			NA	120						
Potentially Significant Site	Why			Open/Closed	Direction					
No	USA Ground			Closed	NA					
Adjacent Land Use										
Open Space										
Remarks										
This site is located about 6 miles north of Highway 20, off of the County Road to Westfall, Oregon. The material is composed of minor amounts of basalt gravel (20%) and tuffs (80%). The terrain is flat with no screening.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										

SW

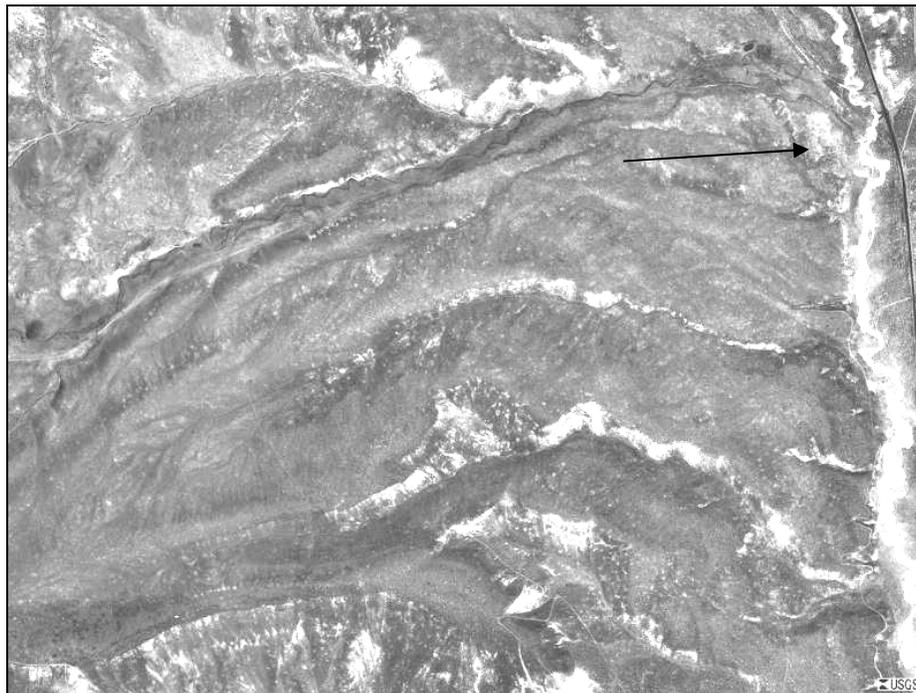
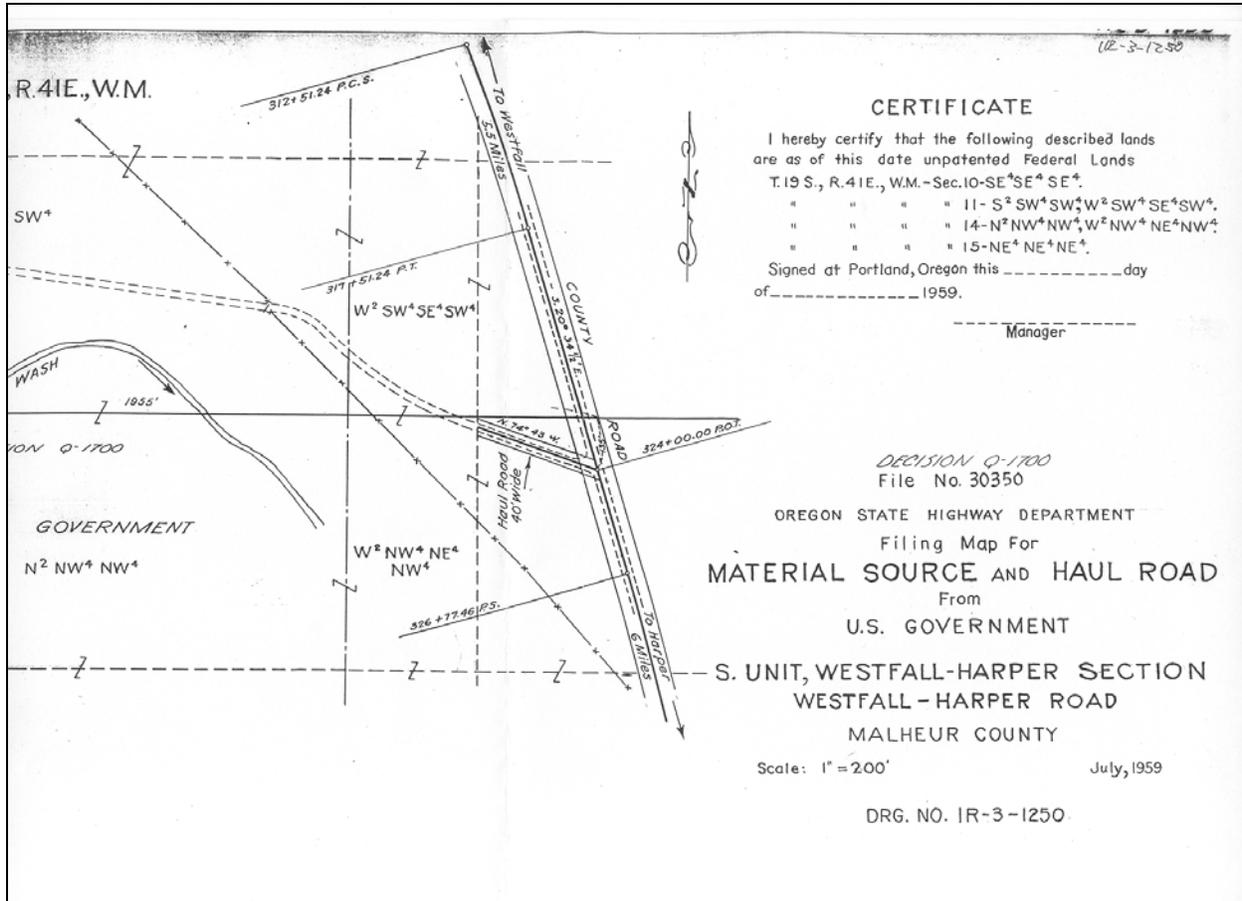
NW



View of the gravel site located about six miles north of Highway 20, off of the County Road to Westfall, OR.



Close-up view of the rock at the gravel site.



Aerial view of the gravel site off of the county road.

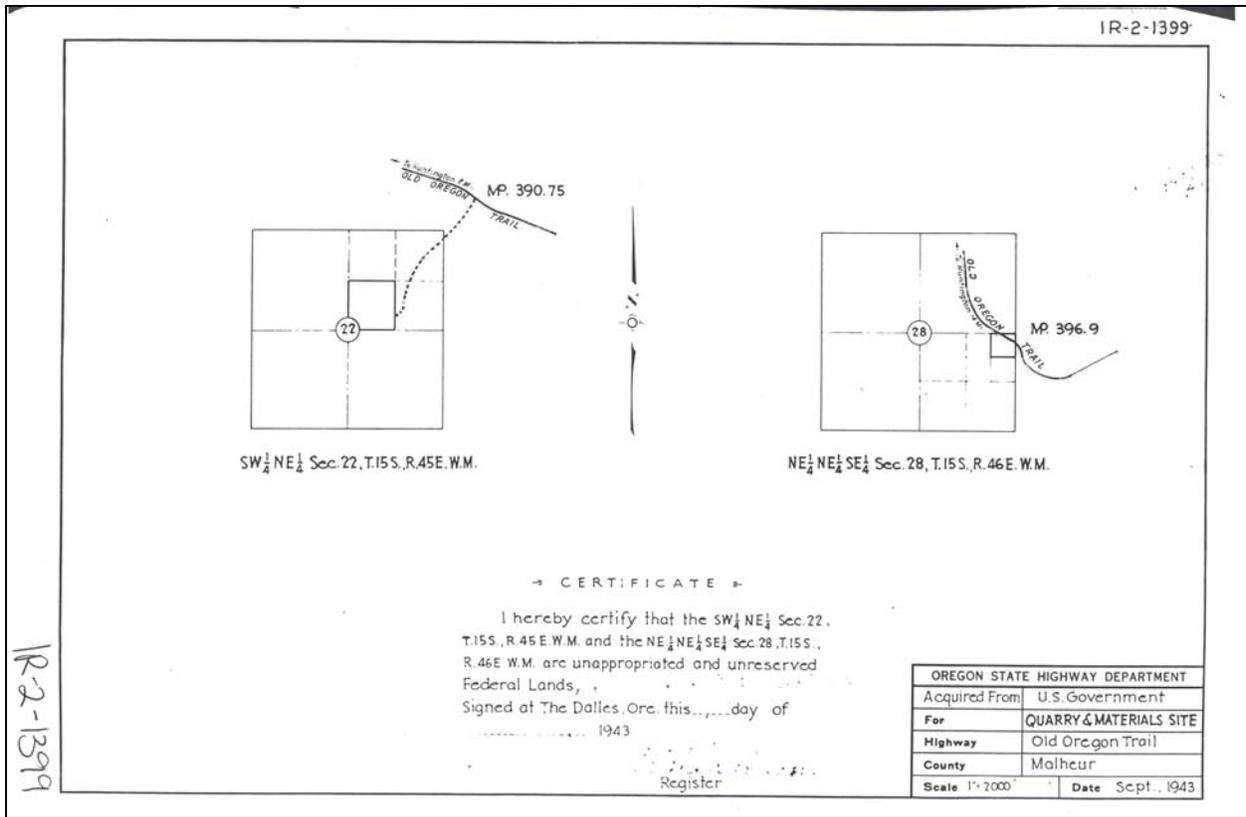
County	Site Name		Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur			14	0455	6.20	15S	45.0E, 46.0E	22, 28
File ID		Source #	Date Visited		Map #		Type of Site	
11086		23-964-5	06/07/2001		1R-2-1399		Stock Pile Site	
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #			
44 14'10.03000"	117 05'16.54000"	730	20	NA				
Comments								
Lat. and Long. acquired using Terrain Navigator Software								
Rock Type	Unit	Color		Weathering		Jointing		
NA	Ts	NA		NA		NA		
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)		
NA			NA	120				
Potentially Significant Site	Why			Open/Closed	Direction			
No	NA			NA	NA			
Adjacent Land Use								
Open space								
Remarks								
This site is located adjacent to and southeast of Highway 201. The ground next to the road is flat and is used as a stockpile site.								
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.
Material Use								

SE

W



View of the site along Highway 201.



Aerial view of the stock pile site along Highway 201.

County	Site Name				Dist	Hwy	Mile Pt	TWP	RGE	Sect
Malheur					14	0456	0	38S	42.0E	04
File ID		Source #	Date Visited	Map #			Type of Site			
NA		23-999-5	07/17/2001	NA			Quarry			
Latitude	Longitude	Elev. (m)	Acreage	Pit Size	DOGAMI Permit #					
42 18'25.91146"	117 48'18.00263"	1579.188	20	<5						
Comments										
Lat. and Long. acquired using Terrain Navigator Software										
Rock Type	Unit	Color		Weathering			Jointing			
Basalt	Tba	Medium Dark Grey (N4)		Slight			Highly Fractured			
Quality			Hardness	lbs./cu ft.	Reserve (cy)	Reserve (Tons)				
Fair to Good			R3	169						
Potentially Significant Site	Why			Open/Closed	Direction					
No	USA Ground			Closed	NA					
Adjacent Land Use										
Open Space										
Remarks										
This site is located west of Highway 95 approximately 350 meters. Most of the pit has been reclaimed, and has limited exposures. The terrain is flat to gradual with limited screening. There is no boundary map for this site near the summit, and the acreage is an approximation for the disturbance.										
202B	203B	211	206 Fine	206 Coarse	208 F	208 F Ht.	208 C	208 C Ht.		
Material Use										



View of the quarry site west of Highway 95.



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

NO AERIAL PHOTO AVAILABLE