

FAXMITTAL

19730-64th AVE W STE 200 Lynnwood, WA 98036-5904 Tel. 425-774-0106

Fax: 425-774-2714

Date:

September 10, 2008

From:

Tony Martin

HWA's Project #: 2007-132-23

Sent To....

Company:	Envirocon	
Attention:	Charles Bird	
PDF:	cbird@envirocon.com	
Phone No.:	503-318-5065	

Number of Pages: 14 (including cover sheet)

ORIGINAL TO FOLLOW BY MAIL	Yes	X No	
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Subject: Chevron Edmonds

Tom,

Please find attached a copy of Field Reports FR-046 through FR-051 and a copy of laboratory test data for sample AG-4 import material for the Chevron Edmonds Project.

If you have any questions regarding the above, please call.

Best Regards,

Tony Martin

Office: 425-774-0106 Cell: 206-794-3126



Lynnwood, WA 98036 Tel. 425-774-0106

Field Report No.: Date (mm/dd/yy):

FR-046 9/2/2007 2007-132-23

HWA Project No.:

HWA Task No.:

Project Name	Location or Address of Project	Permit No.
Chevron Edmonds	Edmonds, WA	
Client	Client Representative	Weather
Envirocon	Tom Schnobrich CHARLES BIRD	Clear/Cool
Design Authority (engineer or architect of record)	Design Authority Representative	HWA Project Manager
		Tony Martin
General Contractor	General Contractor Representative	HWA Field Representative
Envirocon	Chuck Hyatt	John H. "Jack" Carlock

FIELD REPORT

SUMMARY OF FIELD TIME SPENT ON PROJECT TODAY:

First Site Visit: Start Travel: 1045 Arrived at Site:1055 Departed Site: 1205 End Travel: 1215

ACTIVITY BEING INSPECTED: Compaction of Gravel Borrow import placed as excavation backfill.

GENERAL LOCATION: Fill placed as Backfill of Excavation B-1.

DETAILED LOCATION: The approximate locations and elevations tested are summarized on the attached 'Field

Compaction Test Report'.

TYPE OF INSPECTION: Periodic

DETAILS OF PLACEMENT OF THIS MATERIAL: Upon arrival on site it was observed that the contractor was neither placing nor compacting the Gravel Borrow fill. Based on a conversation with Chuck Hyatt, the fill had been placed to grade within Excavation B-2, with only final grading left to be completed.

HWA INSPECTION ACTIVITIES RELATED TO THIS ITEM: HWA conducted nuclear density testing and a physical evaluation of the backfill utilizing a 1/2 inch diameter steel T-handled probe. Both nuclear density testing and our physical evaluation indicated that the backfill material had been placed to the specified degree of compaction or greater. Test results are summarized on the attached 'Field Compaction Test Report'.

CONFORMANCE OF THIS ITEM: To the best of the inspector's knowledge, the item inspected was found in conformance with approved plans, specifications and RFIs.

MISCELLANEOUS ACTIVITIES, OBSERVATIONS AND/OR COMMENTS:

Note: Both elevations and locations are approximations only.

Total time chargeable to this job is 2.0 hours including the time for writing this report.

SIGNATURES:

HWA Field Representative

HWA Project Engineer or Reviewer

SUMMARY OF UNRESOLVED ISSUES

Report# Item# Status



19730-64th Avenue West, Suite 200 Lynnwood, WA 98036

Field Report No.: Date (mm/dd/yy): HWA Project No.: 2007-132-23

FR-046 9/2/2007

HWA Task No.:

Project Name	Location or Address of Project	Permit No.
Chevron Edmonds	Edmonds, WA	
Client	Client Representative	Weather
Envirocon	For Schnobrich CHARLES BIRD	Clear/Cool
Design Authority (engineer or architect of record)	Design Authority Representative	HWA Project Manager
		Tony Martin
General Contractor	General Contractor Representative	HWA Field Representative
Envirocon	Chuck Hyatt	John H. "Jack" Carlock

			dulonty its					Tony I	yecuwana Martin	ger		
General C	Contractor COD	General C Chuck	Contractor	Represent	tative			HWA Fie	d Represe	entative (" Carlo	n le	
	FIELD COMPA			TDEE	ODT	NIIC	IEAD			Cario	JK	
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	ECT IMPROVEMENT TESTED:				eld repo	ort.			· · ·		· · · · · · · · · · · · · · · · · · ·	
	T	Elev'n		170.9		ontrol*			* T			
		or	Probe	/Pr	octor/Ric		hall)	<u> </u>	ield Tes	Moist.	l	ative action
Test		Depth	1	ID	Max.	Opt.	Over	Total	Dry	Moist.	Field	Spec
No.	Detailed Test Location	B.G.**	(in)	#	Dens.	Moist.	Size %	pcf	pcf	%	%	%
1	Excavation B-2, approximate. location is E-Line at 42-Line.	-8ft	12 in	AG-4	128.3	8.1	25.0	135.7	127.3	6.6	99	90
2	Excavation B-2, approximate. location is E-Line at 46-Line.	-8ft	12 in	AG-4	128.3	8.1	25.0	130.7	123.8	5.5	96	90
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Densom		Troxler 3			2950 (as _l Troxler 3	-	-		Other:	4 DD D		
		Standard	-				- Standard		CPN MC 622	1-DK-P		
Lab Cor			-	Modified		.,,o,o,tai Ç	Sundaru	. Joant	<u> </u>			
	Asphalt Marshall Density	-				Theoret	ical Densi	ity (Rice)	ı			

I GRE MIGHTOO		73017 (SOII)	ASTM D2950 (asphalt)	Other:
Densometer:	X Troxler 3440	Troxler 3430	Troxler 3411-B	CPN MC1-DR-P
	Serial #: 29276	Density Standard Count.:	2527 Moisture Stan	dard Count: 622
*Lab Control:	X Standard Proct	or	Modified Proctor	
Accompanying	field report provides addition	ns are approximate. Testing onal information. **Depth B.	Asphalt Maximum Theoretical D provides data only for a specific 3. indicates depth below grade. action below specified value.	Density (Rice) c test location and to a limited depth. Grade means the design finish grade of the
	Completed By: John	H. "Jack" Carlock	Reviewed E	By: <u>Tony Martin</u>



Lynnwood, WA 98036 Tel. 425-774-0106

Field Report No.: Date (mm/dd/yy): FR-047 9/4/2007

HWA Project No.:

2007-132-23

HWA Task No.:

Project Name	Location or Address of Project	Permit No.
Chevron Edmonds	Edmonds, WA	
Client	Client Representative	Weather
Envirocon	Tom-Schriobrich CAMPLES BIRD	Clear/Cool
Design Authority (engineer or architect of record)	Design Authority Representative	HWA Project Manager
		Tony Martin
General Contractor	General Contractor Representative	HWA Field Representative
Envirocon	Chuck Hyatt	Jessica Herrera

FIELD REPORT

SUMMARY OF FIELD TIME SPENT ON PROJECT TODAY:

First Site Visit:

Start Travel: 0630 Arrived at Site: 0700 Departed Site: 0800 End Travel: 0815

ACTIVITY BEING INSPECTED: Compaction of Gravel Borrow import placed as excavation backfill.

GENERAL LOCATION: Fill placed as Backfill of Excavation B-1.

DETAILED LOCATION: The approximate locations and elevations tested are summarized on the attached 'Field

Compaction Test Report'.

TYPE OF INSPECTION: Periodic

DETAILS OF PLACEMENT OF THIS MATERIAL: Based on information provided by the contractor the material had been placed in one lift, approx. two feet thick, and compacted with a caterpillar CS-563E smooth drum vibratory roller.

HWA observed the compaction of this material prior to testing.

HWA INSPECTION ACTIVITIES RELATED TO THIS ITEM: HWA conducted nuclear density testing on the backfill and found that it met or surpassed the specified degree of compaction.

CONFORMANCE OF THIS ITEM: To the best of the inspector's knowledge, the item inspected was found in conformance with approved plans, specifications and RFIs.

MISCELLANEOUS ACTIVITIES, OBSERVATIONS AND/OR COMMENTS:

Total time chargeable to this job is 2.0 hours including the time for writing this report.

SIGNATURES:

Signed:

HWA Field Representative

Reviewed:

HWA Project Engineer or Reviewer

SUMMARY OF UNRESOLVED ISSUES

Report# Item# Status



19730-64th Avenue West, Suite 200 Lynnwood, WA 98036 Tel. 425-774-0106

Field Report No.: Date (mm/dd/yy): HWA Project No.:

FR-047 9/4/2007 2007-132-23

HWA Task No.:

Project Name	Location or Address of Project	Permit No.
Chevron Edmonds	Edmonds, WA	
Client	Client Representative	Weather
Envirocon	Tom Schnobrich CHARLES BIRD	Clear/Cool
Design Authority (engineer or architect of record)	Design Authority Representative	HWA Project Manager
		Tony Martin
General Contractor	General Contractor Representative	HWA Field Representative
Envirocon	Chuck Hyatt	Jessica Herrera

Enviro	con	Chuck	Hyatt					Jessic	a Herre	ra		
	FIELD COMPA	CTION	TES	T REP	ORT	- NUC	LEAR	MET	HOD			
		compa					<u> </u>				·- · · · · · · · · · · · · · · · · · ·	
PROJ	ECT IMPROVEMENT TESTED:		compa	nying fi								
		Elev'n	Б. 1	/_		ontrol*			ield Tes		1	ative
Test		or Depth	Probe Depth	ID (Pro	Max.	ce/Mars Opt.	hall) Over		nsity	Moist.		action
No.	Detailed Test Location	B.G.**	(in)	#	Dens.		Size %	Total pcf	Dry pcf	Moist.	Field %	Spec %
1	Excavation B-1, approximate. location is F-Line at 42-Line.	-6 ft.	8 in	AG-4	128.3	8.1	25.0	127.4	120.9	5.4	94	90
2	Excavation B-1, approximate. location is E-Line at 46-Line.	-6 ft.	8 in	AG-4	130.3	7.6	30.0	136.0	128.2	6.0	98	90
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Test Met	hod X ASTM D2922/D3017 (soil)			ASTM D	2950 (as _l	phalt)			Other:			
Densome	eter: X Troxler 3440	Troxler 3	430		Troxler 3	411-B	_		СРИ МС	1-DR-P		
	Serial #: 61028 Density	Standard	Count.:	2987		Moisture	Standard	Count:	824			
Lab Cor	atrol: X Standard Proctor			Modified	Proctor							
00144	Asphalt Marshall Density			Asphalt N	/laximum	Theoreti	ical Dens	ity (Rice)				
Accompa	NTS: Test locations and elevations are appr anying field report provides additional informa upe of fill material being placed. Bolded resu	ation. **E	epth B.G	. indicate	s depth	below gra	ade. Gra	t location de mean	and to a s the des	limited d ign finish	epth. grade of	the
,	Completed By: Jessica Herre		- 5k				ed By: ˈ	Tonv M	artin			

Reviewed By: Tony Martin



Lynnwood, WA 98036 Tel. 425-774-0106

Field Report No.: Date (mm/dd/yy):

FR-048 9/5/2007 2007-132-23

HWA Project No.: HWA Task No.:

Project Name	Location or Address of Project	Permit No.
Chevron Edmonds	Edmonds, WA	
Client	Client Representative	Weather
Envirocon	Tem Schnobrich CHARLES BIRD	Clear/Cool
Design Authority (engineer or architect of record)		HWA Project Manager
		Tony Martin
General Contractor	General Contractor Representative	HWA Field Representative
Envirocon	Chuck Hyatt	Jessica Herrera

FIELD REPORT

SUMMARY OF FIELD TIME SPENT ON PROJECT TODAY:

First Site Visit:

Start Travel: 1000 Arrived at Site: 1030 Departed Site: 1115 End Travel: 1130

ACTIVITY BEING INSPECTED: Compaction of Gravel Borrow import placed as excavation backfill,

GENERAL LOCATION: Fill placed as Backfill of Excavation B-1.

DETAILED LOCATION: The approximate locations and elevations tested are summarized on the attached 'Field

Compaction Test Report'.

TYPE OF INSPECTION: Periodic

DETAILS OF PLACEMENT OF THIS MATERIAL: Based on information provided by the contractor the material had been placed in 12 inch lifts (uncompacted thickness) and compacted with a caterpillar CS-563E smooth drum vibratory roller. HWA observed the compaction of this material prior to testing.

HWA INSPECTION ACTIVITIES RELATED TO THIS ITEM: HWA conducted nuclear density testing on the backfill and found that it met or surpassed the specified degree of compaction.

CONFORMANCE OF THIS ITEM: To the best of the inspector's knowledge, the item inspected was found in conformance with approved plans, specifications and RFIs.

MISCELLANEOUS ACTIVITIES, OBSERVATIONS AND/OR COMMENTS:

Total time chargeable to this job is 2.0 hours including the time for writing this report.

SIGNATURES

HWA Project Engineer or Reviews

SUMMARY OF UNRESOLVED ISSUES

Report# Item# Status



19730-64th Avenue West, Suite 200 Lynnwood, WA 98036 Tel. 425-774-0106

Field Report No.: FR-048 Date (mm/dd/yy): 9/5/2007 HWA Project No.: 2007-132-23

HWA Task No.:

Project Name	Location or Address of Project	Permit No.
Chevron Edmonds	Edmonds, WA	
Client	Client Representative	Weather
Envirocon	Tem Schnobrien CHARLES BIRD	Clear/Cool
Design Authority (engineer or architect of record)	Design Authority Representative	HWA Project Manager
		Tony Martin
General Contractor	General Contractor Representative	HWA Field Representative
Envirocon	Chuck Hyatt	Jessica Herrera

FIELD COMPACTION TEST REPORT - NUCLEAR METHOD

MATERIAL DEING PLACED	ERIAL BEING PLACE	ΞD:
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see accompanying field report

PROJECT IMPROVEMENT TESTED: see accompanying field report Elev'n Lab Control* Field Test Relative Probe (Proctor/Rice/Marshall) or Density Moist. Compaction Test Depth Depth ID Max. Opt. Over Total Moist. Field Dry Spec No. Detailed Test Location B.G.** (in) # Dens. Moist. Size % pcf pcf %

Excavation B-1, approximate. 1 -4 ft. 8 in AG-4 130.3 7.6 30.0 133.4 126.9 97 5.2 90 location is D-Line at 45-Line. Excavation B-1, approximate. 2 -4 ft. 8 in AG-4 130.3 7.6 30.0 137.3 128.7 6.7 99 90 location is C-Line at 46-Line. Excavation B-1, approximate. -4 ft. 8 in AG-4 130.3 7.6 30.0 134.8 128.1 5.2 98 90 location is E-Line at 46-Line. 4 5 6 7 8 9 10 11

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Test Met	hod	X	ASTM D2922/D	3017 (soil)		ASTM D	2950 (as	phalt)			Other:			L		
Densometer:		X	Troxler 3440		Troxler 34	30		Troxler	3411-B			CPN MC1-DR-P					
		Serial #:	61028	Density	Standard (Count.:	2983		Moisture	Standar	d Count:	817	_				
*Lab Cor	ntrol:	X	Standard Procto	r			Modified	Proctor									
Accompa	anying fi	eld report	Asphalt Marshal ons and elevation t provides addition being placed. B	s are app nal inform	ation. **De	Testing opth B.0	provides 3. indicat	data on es depth	ly for a s _i below gr	oecific te: ade. Gra	sity (Rice st location ade mear	n and to a	a limited sign finis	depth. h grade d	of the		
Completed By: Jessica Herrera						-			Tony N	/lartin	·						



Lynnwood, WA 98036

Tel. 425-774-0106

Fax. 425-774-2714

Field Report No.: Date (mm/dd/yy):

FR-049 9/8/2007

HWA Project No.: 2007-132-23

HWA Task No.:

Project Name	Location or Address of Project	Permit No.
Chevron Edmonds	Edmonds, WA	
Client	Client Representative	Weather
Envirocon	Tom Schnobrich	Clear/Cool
Design Authority (engineer or architect of record)	Design Authority Representative	HWA Project Manager
		Tony Martin
General Contractor	General Contractor Representative	HWA Field Representative
Envirocon	Chuck Hyatt	Jessica Herrera

FIELD REPORT

SUMMARY O	F FIFI D	TIME SPENT	ON PRO	JECT TODAY

First Site Visit:

Start Travel: 0640 Arrived at Site: 0700 Departed Site: 0810 End Travel: 0815

ACTIVITY BEING INSPECTED: Compaction of Gravel Borrow import placed as excavation backfill.

GENERAL LOCATION: Fill placed as Backfill of Excavation B-1.

DETAILED LOCATION: The approximate locations and elevations tested are summarized on the attached 'Field

Compaction Test Report'.

TYPE OF INSPECTION: Periodic

DETAILS OF PLACEMENT OF THIS MATERIAL: Based on information provided by the contractor the material had been placed in 12 inch lifts (uncompacted thickness) and compacted with a caterpillar CS-563E smooth drum vibratory roller. HWA observed the compaction of this material prior to testing.

HWA INSPECTION ACTIVITIES RELATED TO THIS ITEM: HWA conducted nuclear density testing on the backfill and found that it met or surpassed the specified degree of compaction.

CONFORMANCE OF THIS ITEM: To the best of the inspector's knowledge, the item inspected was found in conformance with approved plans, specifications and RFIs.

MISCELLANEOUS ACTIVITIES, OBSERVATIONS AND/OR COMMENTS:

Total time chargeable to this job is 2.0 hours including the time for writing this report.

SIGNATURES:

Signed:

HWA Field Representativ Reviewed:

HWA Project Engineer or Reviewer

SUMMARY OF UNRESOLVED ISSUES

Report# Item# Status



Lynnwood, WA 98036 Tel. 425-774-0106

Field Report No.: Date (mm/dd/yy):

FR-049 9/8/2007 HWA Project No.: 2007-132-23

HWA Task No.:

Project Name	Location or Address of Project	Permit No.
Chevron Edmonds	Edmonds, WA	
Client	Client Representative	Weather
Envirocon	Tom Schnobrich	Clear/Cool
Design Authority (engineer or architect of record)	Design Authority Representative	HWA Project Manager
		Tony Martin
General Contractor	General Contractor Representative	HWA Field Representative
Envirocon	Chuck Hyatt	Jessica Herrera

FIELD COMPACTION TEST REPORT - NUCLEAR METHOD

MATE	RIAL	BFING	PLACED:
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see accompanying field report

PROJECT IMPROVEMENT TESTED:

see accompanying field report

	EOT IIVII NOVEMENT TESTED:	see accompanying held report											
		Elev'n				ontrol*			ield Te		Rela	ative	
	,	or	Probe		octor/Ric	ce/Mars	hali)	Der	nsity	Moist.	Comp	Compaction	
Test		Depth	Depth		Max.	Opt.	Over	Total	Dry	Moist.	Field	Spec	
No.	Detailed Test Location	B.G.**	(in)	#	Dens.	Moist.	Size %	pcf	pcf	%	%	%	
1	Excavation B-1, approximate. location is F-Line at 41-Line.	-4 ft.	8 in	AG-4	130.3	7.6	30.0	134.5	128.2	4.9	98	90	
2	Excavation B-1, approximate. location is C-Line at 46-Line.	-4 ft.	8 in	AG-4	130.3	7.6	30.0	132.5	126.3	5.0	97	90	
3	Excavation B-1, approximate. location is E-Line at 46-Line.	-4 ft.	8 in	AG-4	130.3	7.6	30.0	134.3	128.7	4.3	99	90	
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Test Me	thod X ASTM D2922/D3017 (soil	<u> </u>		ASTM D	2050 /				Other:				

i est ivieti iou	AO HVI	DZ9ZZID3017 (SUII)		. พอ เพเษะของ (ฮ	spnait)	Otner:
Densometer:	X Troxle	r 3440	Troxler 3430	Troxler	3411-B	CPN MC1-DR-P
	Serial #: 61028	Density	Standard Count.:	2984	Moisture Standard Count:	805
*Lab Control:	X Standa	ard Proctor		Modified Proctor		
	Aspha	It Marshall Density		Asphalt Maximu	m Theoretical Density (Rice	e)
COMMENTS:	Test locations and	l elevations are app	roximate. Testing	provides data or	nly for a specific test locatio	n and to a limited depth.
Accompanying	field report provide	es additional informa	ation. **Depth B.	G. indicates dept	h below grade. Grade mea	ns the design finish grade of the
current type of	fill material being	olaced. Bolded resu	ilts indicate comp	action below spe	cified value.	
	Completed By	/: <u>Jessica Herre</u>	ra	-	Reviewed By: Tony	Martin



General Contractor Representative

Lynnwood, WA 98036

Tel. 425-774-0106

Fax. 425-774-2714

Field Report No.: Date (mm/dd/yy): FR-050 9/9/2007

HWA Task No.:

HWA Field Representative

Jessica Herrera

HWA Project No.: 2007-132-23

Project Name	Location or Address of Project	Permit No.
Chevron Edmonds	Edmonds, WA	
Client	Client Representative	Weather
Envirocon	For Schnobrich CHARLES BIRD	Clear/Cool
Design Authority (engineer or architect of record)	Design Authority Representative	HWA Project Manager
		Tony Martin

FIELD REPORT

SUMMARY OF FIELD TIME SPENT ON PROJECT TODAY:

First Site Visit:

General Contractor

Envirocon

Start Travel: 0800 Arrived at Site: 0815 Departed Site: 0855 End Travel: 0900

ACTIVITY BEING INSPECTED: Compaction of Gravel Borrow import placed as excavation backfill.

Chuck Hyatt

GENERAL LOCATION: Fill placed as Backfill of Excavation B-1.

DETAILED LOCATION: The approximate locations and elevations tested are summarized on the attached 'Field Compaction Test Report'.

TYPE OF INSPECTION: Periodic

DETAILS OF PLACEMENT OF THIS MATERIAL: Based on information provided by the contractor the material had been placed in 12 inch lifts (uncompacted thickness) and compacted with a caterpillar CS-563E smooth drum vibratory roller. HWA observed the compaction of this material prior to testing.

HWA INSPECTION ACTIVITIES RELATED TO THIS ITEM: HWA conducted nuclear density testing of the backfill and found that it met or surpassed the specified degree of compaction.

CONFORMANCE OF THIS ITEM: To the best of the inspector's knowledge, the item inspected was found in conformance with approved plans, specifications and RFIs.

MISCELLANEOUS ACTIVITIES, OBSERVATIONS AND/OR COMMENTS:

Total time chargeable to this job is 1.5 hours including the time for writing this report.

FOR JESSICA

SIGNATURES:

Signed: HWA Field Representative Reviewed:

HWA Project Engineer or Reviewe

SUMMARY OF UNRESOLVED ISSUES

Report# Item# Status



19730-64th Avenue West, Suite 200 Lynnwood, WA 98036 Tel. 425-774-0106

FR-050 Field Report No.: Date (mm/dd/yy): 9/9/2007 HWA Project No.: 2007-132-23

HWA Task No.:

Project Name	Location or Address of Project	Permit No.
Chevron Edmonds	Edmonds, WA	
Client	Client Representative	Weather
Envirocon	Tom-Schnobrich CHARLES BIRD	Clear/Cool
Design Authority (engineer or architect of record)	Design Authority Representative	HWA Project Manager
		Tony Martin
General Contractor	General Contractor Representative	HWA Field Representative
Envirocon	Chuck Hyatt	Jessica Herrera

FIELD COMPACTION TEST REPORT - NUCLEAR METHOD

MATERIAL BEING PLACED:	see accompanying field report	
PROJECT IMPROVEMENT TEST	TED: see accompanying field report	

		Elev'n			Lab C	ontrol*		F	ield Te	Relative		
		or	Probe			ce/Mars	_		nsity	Moist.	Compaction	
Test		Depth	Depth		Max.	Opt.	Over	Total	Dry	Moist.	Field	Spec
No.	Detailed Test Location	B.G.**	(in)	#	Dens.	Moist.	Size %	pcf	pcf	%	%	%
1	Excavation B-1, approximate. location is D-Line at 43-Line.	-2.5 ft.	8 in	AG-4	130.3	7.6	30.0	134.0	127.1	5.5	98	90
2	Excavation B-1, approximate. location is F-Line at 46-Line.	-2.5 ft.	8 in	AG-4	130.3	7.6	30.0	132.6	125.9	5.3	97	90
3	Excavation B-1, approximate. location is F-Line at 44-Line.	-2.5 ft.	8 in	AG-4	130.3	7.6	30.0	134.6	127.2	5.8	98	90
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Test Method		Χ	ASTM D2922/D3	3017 (soil)			ASTM D	2950 (as	phalt)			Other:		
Densometer:		X	Troxler 3440		Troxler 3	3430	,.	Troxler 3	841 1- B	,		CPN MC	1-DR-P	
Serial #: 61028 Density Standard (d Count.:	2984		Moisture	Standar	d Count:	813			
*Lab Control: X Standard Proctor				Modified	Proctor									
Accompa	Asphalt Marshall Density Asphalt Maximum Theoretical Density (Rice) COMMENTS: Test locations and elevations are approximate. Testing provides data only for a specific test location and to a limited depth. Accompanying field report provides additional information. **Depth B.G. indicates depth below grade. Grade means the design finish grade of the current type of fill material being placed. Bolded results indicate compaction below specified value.													
Completed By: Jessica Herrera					ra		Reviewed By: Tony Martin							



Lynnwood, WA 98036

Tel. 425-774-0106

Fax. 425-774-2714

Field Report No.: Date (mm/dd/yy):

HWA Project No.:

FR-051 9/10/2007

2007-132-23

HWA Task No.:

Project Name	Location or Address of Project	Permit No.
Chevron Edmonds	Edmonds, WA	
Client	Client Representative	Weather
Envirocon	Charles Bird	Clear/Cool
Design Authority (engineer or architect of record)	Design Authority Representative	HWA Project Manager
	·	Tony Martin
General Contractor	General Contractor Representative	HWA Field Representative
Envirocon	Chuck Hyatt	Jessica Herrera

FIELD REPORT

SUMMARY OF FIELD TIME SPENT ON PROJECT TODAY:

First Site Visit:

Start Travel: 0910 Arrived at Site: 0925 Departed Site: 1015 End Travel: 1015

ACTIVITY BEING INSPECTED: Compaction of Gravel Borrow import placed as excavation backfill,

GENERAL LOCATION: Fill placed as Backfill of Excavation B-1.

DETAILED LOCATION: The approximate locations and elevations tested are summarized on the attached 'Field

Compaction Test Report'.

TYPE OF INSPECTION: Periodic

DETAILS OF PLACEMENT OF THIS MATERIAL: Based on information provided by the contractor the material had been placed in 12 inch lifts (uncompacted thickness) and compacted with a caterpillar CS-563E smooth drum vibratory roller. HWA observed the compaction of this material prior to testing.

HWA INSPECTION ACTIVITIES RELATED TO THIS ITEM: HWA conducted nuclear density testing of the backfill and found that it met or surpassed the specified degree of compaction.

CONFORMANCE OF THIS ITEM: To the best of the inspector's knowledge, the item inspected was found in conformance with approved plans, specifications and RFIs.

MISCELLANEOUS ACTIVITIES, OBSERVATIONS AND/OR COMMENTS:

Total time chargeable to this job is 1.5 hours including the time for writing this report.

SIGNATURES:

Signed:

HWA Field Representati

Reviewed:

HWA Project Engineer or Reviewer

SUMMARY OF UNRESOLVED ISSUES

Report# Item# Status



Lynnwood, WA 98036 Tel. 425-774-0106

Field Report No.: Date (mm/dd/yy): 9/10/2007 HWA Project No.:

FR-051 2007-132-23

HWA Task No.:

Project Name	Location or Address of Project	Permit No.
Chevron Edmonds	Edmonds, WA	
Client	Client Representative	Weather
Envirocon	Charles Bird	Clear/Cool
Design Authority (engineer or architect of record)	Design Authority Representative	HWA Project Manager
	·	Tony Martin
General Contractor	General Contractor Representative	HWA Field Representative
Envirocon	Chuck Hyatt	Jessica Herrera

	FIELD COMPACTION TEST REPORT - NUCLEAR METHOD											
MATE	RIAL BEING PLACED: see ac	compai	nying fi	eld repo	ort							
PROJ	PROJECT IMPROVEMENT TESTED: see accompanying field report											
		Elev'n			Lab C	ontrol*		Field Test			Relative	
		or	Probe			ce/Marsi	,		nsity	Moist.	Compaction	
Test	Detelled Test Leading	Depth	Depth		Max.	Opt.	Over	Total	Dry	Moist.	Field	Spec
No.	Detailed Test Location Excavation B-1, approximate.	B.G.**	(in)	#	Dens.	Moist.	Size %	pcf	pcf	%	%	%
1	location is F-Line at 40-Line.	grade	8 in	AG-4	130.3	7.6	30.0	132.6	126.5	4.8	97	90
2	Excavation B-1, approximate. location is E-Line at 41-Line.	grade	8 in	AG-4	130.3	7.6	30.0	132.3	126.3	4.8	97	90
3	Excavation B-1, approximate. location is E-Line at 44-Line.	-1'	8 in	AG-4	130.3	7.6	30.0	132.8	126.5	4.9	97	90
4	Excavation B-1, approximate. location is C-Line at 46-Line.	-1	8 in	AG-4	130.3	7.6	30.0	130.4	125.2	4.1	96	90
5												
6					,							
7												
8												
9												
10					, , , , , , , , , , , , , , , , , , , ,							
11												
12												
13			-		·							
Test Me	thod X ASTM D2922/D3017 (soil))	(Nontheatestand	ASTM D	2950 (as	phalt)]	-William Control	Other:			***************************************
Densom	, , , , , , , , , , , , , , , , , , , 	Troxler 3			Troxler 3		-		CPN MC	1-DR-P		
		Standard	Count.:				Standard					
*Lab Co	ntrol: X Standard Proctor			Modified	Proctor			-				

					<u></u>				-540-55-10-territoria			
Test Method	X	ASTM D2922/D3	017 (soil)	NOTE OF THE O	ASTM D	2950 (asph	nalt)			Other:		
Densometer:	X	Troxler 3440	Troxler	3430	· · · · · · · · · · · · · · · · · · ·	Troxler 341	11-B	_	•••••	CPN MC	1-DR-P	
	Serial #:	61028	Density Standar	d Count.:	2989	Mo	loisture S	Standard	d Count:	808		
*Lab Control:	X	Standard Proctor			Modified	Proctor						
Accompanying t	field report	Asphalt Marshall ons and elevations to provides additionabling placed. Bo	are approximate al information. **	Depth B.	provides G. indicate	es depth be	for a spe elow gra	ecific tes ide. Gra	t location	n and to a		of the
	Comple	ted By: <u>Jessica</u>	a Herrera			Re	eviewe	ed By:]	Tony N	1artin		



FAXMITTAL

19730-64th AVE W STE 200 Lynnwood, WA 98036-5904 Tel. 425-774-0106

Fax: 425-774-2714

Date:

September 12, 2008

From:

Tony Martin

HWA's Project #: 2007-132-23

Sent To....

Company:	Envirocon	
Attention:	Charles Bird	
PDF:	cbird@envirocon.com	
Phone No.:	503-318-5065	

Number of Pages: 3 (including cover sheet)

-				
	ORIGINAL TO FOLLOW BY MAIL	Yes	X No	

Subject: Chevron Edmonds

Tom,

Please find attached a copy of Field Reports FR-052 for the Chevron Edmonds Project.

If you have any questions regarding the above, please call.

Best Regards,

Tony Martin

Office: 425-774-0106 Cell: 206-794-3126



Lynnwood, WA 98036

Tel. 425-774-0106

Fax. 425-774-2714

Field Report No.: Date (mm/dd/yy): FR-052 9/12/2007 2007-132-23

HWA Project No.: HWA Task No.:

Jessica Herrera

Project Name	Location or Address of Project	Permit No.
Chevron Edmonds	Edmonds, WA	
Client	Client Representative	Weather
Envirocon	Charles Bird	Clear/Cool
Design Authority (engineer or architect of record)	Design Authority Representative	HWA Project Manager
		Tony Martin
General Contractor	General Contractor Representative	HWA Field Representative

FIELD REPORT

SUMMARY OF FIELD TIME SPENT ON PROJECT TODAY:

First Site Visit:

Envirocon

Start Travel: 0655 Arrived at Site: 0720 Departed Site: 0810 End Travel: 0815

ACTIVITY BEING INSPECTED: Compaction of Gravel Borrow import placed as excavation backfill.

Chuck Hyatt

GENERAL LOCATION: Fill placed as Backfill of Excavation B-9 and B-19.

DETAILED LOCATION: The approximate locations and elevations tested are summarized on the attached 'Field

Compaction Test Report'.

TYPE OF INSPECTION: Periodic

DETAILS OF PLACEMENT OF THIS MATERIAL: No information was provided regarding lift thickness or placement details except that the material was compacted with a caterpillar CS-563E smooth drum vibratory roller. HWA did not observe the compaction of this material prior to testing.

HWA INSPECTION ACTIVITIES RELATED TO THIS ITEM: HWA conducted nuclear density testing of the backfill and found that it met or surpassed the specified degree of compaction.

CONFORMANCE OF THIS ITEM: To the best of the inspector's knowledge, the item inspected was found in conformance with approved plans, specifications and RFIs.

MISCELLANEOUS ACTIVITIES, OBSERVATIONS AND/OR COMMENTS:

Total time chargeable to this job is 1.5 hours including the time for writing this report.

SIGNATURES:

Signed:

HWA Field Representative

HWA Project Engineer of Reviewer

SUMMARY OF UNRESOLVED ISSUES

Report# Item# Status



Lynnwood, WA 98036

Tel. 425-774-0106

Field Report No.: Date (mm/dd/yy):

FR-052 9/12/2007 2007-132-23

HWA Project No.: **HWA Task No.:**

Project Name	Location or Address of Project	Permit No.
Chevron Edmonds	Edmonds, WA	·
Client	Client Representative	Weather
Envirocon	Charles Bird	Clear/Cool
Design Authority (engineer or architect of record)	Design Authority Representative	HWA Project Manager
		Tony Martin
General Contractor	General Contractor Representative	HWA Field Representative
Envirocon	Chuck Hyatt	Jessica Herrera

FIELD COMPACTION TEST REPORT - NUCLEAR METHOD

MATERIAL	BEING	PLACED:

see accompanying field report

PROJECT IMPROVEMENT TESTED:

see accompanying field report

		Elev'n				ontrol*			ield Te			ative
77 4		or	Probe	(**************************************			Density Moist.			Compaction		
Test	Detailed Test 1 40 -	Depth	Depth	1	Max.	Opt.	Over	Total	Dry	Moist.	Field	Spec
No.	Detailed Test Location	B.G.**	(in)	#	Dens.	Moist.	Size %	pcf	pcf	%	%	%
1	Excavation B-9, 7' West of Eastern Bank, 5' North of Southern bank	-3'	8 in	AG-4	130.3	7.6	30.0	139.9	134.2	4.3	103	90
2	Excavation B-9, 7' West of Eastern Bank, 6' South of Northern bank	-3'	8 in	AG-4	130.3	7.6	30.0	134.5	126.7	6.1	97	90
3	Excavation B-19, 10' South of Northern Bank, 5' West of Eastern bank	grade	8 in	AG-4	130.3	7.6	30.0	132.0	127.1	3.8	98	90
4	Excavation B-19, 10' South of Northern Bank, 15' West of Eastern bank	grade	8 in	AG-4	130.3	7.6	30.0	137.3	133.1	3.1	102	90
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11	-		•									
12												
13					-,, -,, -,							***************************************

									Į.	l		II	
Test Method	X	ASTM D2922/D3	017 (soil)		ASTM [)2950 (as	phalt)			Other:		December Control C	***************************************
Densometer:	X	Troxler 3440	Tr	oxler 3430		Troxler 3	3411-B			CPN MC	1-DR-P		
	Serial #:	61028	Density Sta	andard Cour	t.: <u>2981</u>		Moisture	Standar	d Count:	808			
*Lab Control:	X	Standard Proctor			Modified	l Proctor							
Accompanying	field report	Asphalt Marshall ons and elevations provides addition being placed. Bo	are approx al informatio	on. **Depth	ng provide B.G. indica	tes depth	ly for a sp below gr	pecific tes rade. Gra	st location	nand to a	a limited sign finis	depth. h grade o	of the
	Comple	ted By: Jessica	a Herrera				Review	ed Bv:	Tony M	Martin (



FAXMITTAL

19730-64th AVE W STE 200 Lynnwood, WA 98036-5904 Tel. 425-774-0106

Fax: 425-774-2714

Date:

September 16, 2008

From:

Tony Martin

HWA's Project #: 2007-132-23

Sent To....

Company:	Envirocon	
Attention:	Charles Bird	
PDF:	cbird@envirocon.com	
Phone No.:	503-318-5065	

Number of Pages: 3 (including cover sheet)

ORIGINAL TO FOLLOW BY MAIL	Yes	X No	İ

Subject: Chevron Edmonds

Tom,

Please find attached a copy of Field Reports FR-053 for the Chevron Edmonds Project.

If you have any questions regarding the above, please call.

Best Regards,

Tony Martin

Office: 425-774-0106 Cell: 206-794-3126



Lynnwood, WA 98036

Tel. 425-774-0106

Fax. 425-774-2714

Field Report No.: Date (mm/dd/yy):

FR-053 9/15/2007 2007-132-23

HWA Project No.: HWA Task No.:

Project Name	Location or Address of Project	Permit No.			
Chevron Edmonds	Edmonds, WA				
Client	Client Representative	Weather			
Envirocon	Charles Bird	Clear/Cool			
Design Authority (engineer or architect of record)	Design Authority Representative	HWA Project Manager			
		Tony Martin			
General Contractor	General Contractor Representative	HWA Field Representative			
Envirocon	Chuck Hyatt	Jessica Herrera			

FIELD REPORT

SUMMARY OF FIELD TIME SPENT ON PROJECT TODAY:

First Site Visit:

Start Travel: 0700 Arrived at Site: 0720 Departed Site: 0800 End Travel: 0815

ACTIVITY BEING INSPECTED: Compaction of Gravel Borrow import placed as excavation backfill.

GENERAL LOCATION: Fill placed as Backfill of Excavation B-9 and B-7.

DETAILED LOCATION: The approximate locations and elevations tested are summarized on the attached 'Field

Compaction Test Report'.

TYPE OF INSPECTION: Periodic

DETAILS OF PLACEMENT OF THIS MATERIAL: No information was provided regarding lift thickness or placement details except that the material was compacted with a caterpillar CS-563E smooth drum vibratory roller. HWA did not observe the compaction of this material prior to testing.

HWA INSPECTION ACTIVITIES RELATED TO THIS ITEM: HWA conducted nuclear density testing on the uppermost 10" of the filled area and found that the material met or surpassed the compaction requirement.

CONFORMANCE OF THIS ITEM: To the best of the inspector's knowledge, the item inspected was found in conformance with approved plans, specifications and RFIs.

MISCELLANEOUS ACTIVITIES, OBSERVATIONS AND/OR COMMENTS:

At the request of Chuck Hyatt a sample of native material was collected from stockpiles at the jobsite. HWA obtained 3 bags of this material (approx. 20 pounds each). The sample was designated S-1 and transported to our office in Lynnwood for testing.

Total time chargeable to this job is 1.5 howrs including the time for writing this report.

SIGNATURES:

HWA Field Representative

Reviewed:

HWA Project Engineer or Reviewer

SUMMARY OF UNRESOLVED ISSUES

Report# Item# Status



19730-64th Avenue West, Suite 200 Lynnwood, WA 98036 Tel. 425-774-0106

Field Report No.: Date (mm/dd/yy): HWA Project No.:

FR-053 9/15/2007 2007-132-23

HWA Task No.:

Project Name	Location or Address of Project	Permit No.
Chevron Edmonds	Edmonds, WA	<u>'</u>
Client	Client Representative	Weather
Envirocon	Charles Bird	Clear/Cool
Design Authority (engineer or architect of record)	Design Authority Representative	HWA Project Manager
		Tony Martin
General Contractor	General Contractor Representative	HWA Field Representative
Envirocon	Chuck Hyatt	Jessica Herrera

FIELD COMPACTION TEST REPORT - NUCLEAR METHOD

MATERIAL	BEING	PLACED:
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see accompanying field report

PROJECT IMPROVEMENT TESTED: see accompanying field report

		Elev'n			Lab C	Lab Control*			Field Test			ative
		or	Probe				Density Moist.			Compaction		
Test No.	Detailed Test Location	Depth B.G.**	Depth		Max.	Opt.	Over	Total	Dry	Moist,	Field	Spec
110.	Excavation B-9, 10' North of Southern	B.G.	(in)	#	Dens.	Moist.	Size %	pcf	pcf	%	%	%
1	bank, 15' West of Eastern bank	grade	8 in	AG-4	130.3	7.6	30.0	128.3	123.1	4.2	94	90
2	Excavation B-9, 10' North of Southern bank, 15' West of Eastern bank	grade	8 in	AG-4	130.3	7.6	30.0	129.9	124.7	4.1	96	90
3	Excavation B-7, 10' North of Southern bank, 5' East of Western bank	grade	8 in	AG-4	130.3	7.6	30.0	127.6	123.3	3.6	95	90
4												
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MANUAL CONTRACTOR OF THE CONTR								ĺ
Test Method	XASTM D2922	/D3017 (soil)	ASTM D	2950 (asphalt)		Other:	4	
Densometer:	X Troxler 3440	Troxler	3430	Troxler 3411-B		 _CPN MC1-DR-P		
	Serial #: 61028	Density Standar	rd Count.: 2980	Moisture	Standard Coun	 t: 815		
*Lab Control:	X Standard Prod	etor	Modified	Proctor				
Accompanying i	Asphalt Marsi Test locations and elevati field report provides addi ill material being placed.	ons are approximate ional information. **	e. Testing provides Depth B.G. indicate	s depth below gr	pecific test locati rade. Grade me	on and to a limited	depth. h grade o	of the
	Completed By: Jess	sica Herrera	·	Review	ed By: Tony	Martin		



FAXMITTAL

19730-64th AVE W STE 200 Lynnwood, WA 98036-5904 Tel. 425-774-0106

Fax: 425-774-2714

Date:

September 17, 2008

From:

Tony Martin

HWA's Project #: 2007-132-23

Sent To....

Company:	Envirocon	
Attention:	Charles Bird	
PDF:	cbird@envirocon.com	
Phone No.:	503-318-5065	

Number of Pages: 5 (including cover sheet)

			-
ORIGINAL TO FOLLOW BY MAIL	Yes	X No	

Subject: Chevron Edmonds

Tom,

Please find attached a copy of Field Report FR-054 and copies of laboratory test results for sample designated AW S-1 for the Chevron Edmonds Project.

If you have any questions regarding the above, please call.

Best Regards,

Tony Martin

Office: 425-774-0106 Cell: 206-794-3126



Lynnwood, WA 98036

Tel. 425-774-0106

Field Report No.: Date (mm/dd/yy): FR-054 9/17/2007 2007-132-23

HWA Project No.: HWA Task No.:

Project Name	Location or Address of Project	Permit No.
Chevron Edmonds	Edmonds, WA	
Client	Client Representative	Weather
Envirocon	Charles Bird	Clear/Cool
Design Authority (engineer or architect of record)	Design Authority Representative	HWA Project Manager
		Tony Martin
General Contractor	General Contractor Representative	HWA Field Representative
Envirocon	Chuck Hyatt	John H. "Jack" Carlock

FIELD REPORT

SUMMARY OF FIELD TIME SPENT ON PROJECT TODAY:

First Site Visit:

Start Travel: 1000 Arrived at Site: 1015 Departed Site: 1050 End Travel: 1100

ACTIVITY BEING INSPECTED: Compaction of Gravel Borrow import and site soil placed as excavation backfill. GENERAL LOCATION: Fill placed as Backfill of Excavation B-8 and the Asphalt Warehouse excavation. DETAILED LOCATION: The approximate locations and elevations tested are summarized on the attached 'Field

Compaction Test Report'.

TYPE OF INSPECTION: Periodic

DETAILS OF PLACEMENT OF THIS MATERIAL: No information was provided regarding lift thickness or placement details except that the material was compacted with a caterpillar CS-563E smooth drum vibratory roller. HWA did not observe placement of either material. HWA observed compaction efforts in the Asphalt Warehouse excavation prior to testing only. We did not observe compaction activities in the area of Excavation B-8.

HWA INSPECTION ACTIVITIES RELATED TO THIS ITEM: HWA conducted nuclear density testing on the uppermost 10" of the filled area and found that the material met or surpassed the compaction requirement.

CONFORMANCE OF THIS ITEM: To the best of the inspector's knowledge, the item inspected was found in conformance with approved plans, specifications and RFIs.

MISCELLANEOUS ACTIVITIES, OBSERVATIONS AND/OR COMMENTS:

Total time chargeable to this job is 1.5 hours including the time for writing this report.

SIGNATURES:

HWA Field Representative

Reviewed:

HWA Project Engineer or Reviewer

SUMMARY OF UNRESOLVED ISSUES

Report# Item# Status



19730-64th Avenue West, Suite 200 Lynnwood, WA 98036 Tel. 425-774-0106

Field Report No.: FR-054 Date (mm/dd/yy): 9/17/2007 HWA Project No.: 2007-132-23

HWA Task No.:

Project Name	Location or Address of Project	Permit No.
Chevron Edmonds	Edmonds, WA	
Client	Client Representative	Weather
Envirocon	Charles Bird	Clear/Cool
Design Authority (engineer or architect of record)	Design Authority Representative	HWA Project Manager
·		Tony Martin
General Contractor	General Contractor Representative	HWA Field Representative
Envirocon	Chuck Hyatt	John H. "Jack" Carlock

General Contractor			General Contractor Representative					HWA Field Representative				
Envirocon			Hyatt					John H. "Jack" Carlock				
	FIELD COMPA			TDEE	ODT	NUIC	IEAD					
MATE		ccompa.				- 1400	LEAN	INIT	HOD			
PROJ	ECT IMPROVEMENT TESTED:	· · · · · · · · · · · · · · · · · · ·			eld repo	ort						
		Elev'n			Lab C	ontrol*		F	ield Tes	st	Rela	ative
		or	Probe	(Pro	octor/Ric	ce/Mars	hall)	Der	nsity	Moist.	Comp	action
Test		Depth		ID	Max.	Opt.	Over	Total	Dry	Moist.	Field	Spec
No.	Detailed Test Location	B.G.**	(in)	#	Dens.	Moist.	Size %	pcf	pcf	%	%	%
1	Excavation B-8, 15ft south of northern boundary, 8ft east of bank shoulder.	grade	12 in	AG-4	130.3	7.6	30.0	128.5	121.7	5.6	93	90
2	Excavation B-8, 10' North of Southern bank, 15' West of Eastern bank.	grade	12 in	AG-4	130.3	7.6	30.0	131.7	125.0	5.3	96	90
3	Asphalt Warehouse Excavation, southeastern quadrant of excavation.	-18in	12 in	AW S-1	126.1	10.5	6.5	129.9	119.8	8.4	95	90
4	Asphalt Warehouse Excavation, northwestern quadrant of excavation.	-5.5ft	12 in	AW S-1	126.1	10.5	6.5	130.9	117.9	11.0	93	90
5												
6												
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8	AND THE REAL PROPERTY AND ADMINISTRATION ADMINISTRATION AND ADMINISTRATION AND ADMINISTRATION AND ADMINISTRATION ADMINISTRATION AND ADMINISTRATION ADMINISTRATION AND ADMINISTRATION AND ADMINISTRATION AND ADMINISTRATION ADMINISTRATION ADMINISTRATION ADMINISTRATION ADMINISTRATION AND ADMINISTRATION ADMINISTRATION AND ADMINISTRATION AND											
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Test Me		•			2950 (as				Other:			
Densom		_Troxler 3		···	Troxler 3				CPN MC	:1-DR-P		
		Standard				Moisture	Standar	d Count:	624			
*Lab Co	1			Modified	Proctor							
	Asphalt Marshall Density			Asphalt	Maximum	Theore	tical Dens	ity (Rice)			

	·	•		•	
	Serial #:	29276	Density Standard Count	.: 2552	Moisture Standard Count: 624
*Lab Control:	X	Standard Proctor	-	Modified Proctor	
		Asphalt Marshall	Density	Asphalt Maximu	m Theoretical Density (Rice)
COMMENTS:	Test location	ons and elevations	s are approximate. Testir	ng provides data or	nly for a specific test location and to a limited depth.
					h below grade. Grade means the design finish grade of the
			olded results indicate com		
	Comple	ted By: <u>John F</u>	I. "Jack" Carlock		Reviewed By: Tony Martin



FAXMITTAL

19730-64th AVE W STE 200 Lynnwood, WA 98036-5904 Tel. 425-774-0106

Fax: 425-774-2714

Date:

September 19, 2008

From:

Tony Martin

HWA's Project #: 2007-132-23

Sent To....

Company:	Envirocon	,
Attention:	Charles Bird	
PDF:	cbird@envirocon.com	
Phone No.:	503-318-5065	

Number of Pages: 3 (including cover sheet)

- 1				
	ORIGINAL TO FOLLOW BY MAIL	Yes	X No	

Subject: Chevron Edmonds

Tom,

Please find attached a copy of Field Report FR-055 for the Chevron Edmonds Project.

If you have any questions regarding the above, please call.

Best Regards,

Tony Martin

Office: 425-774-0106 Cell: 206-794-3126



19730-64th Avenue West, Suite 200 Lynnwood, WA 98036

Tel. 425-774-0106 Fax. 425-774-2714 Field Report No.: Date (mm/dd/yy): HWA Project No.:

FR-055 9/18/2007 2007-132-23

HWA Task No.:

Project Name	Location or Address of Project	Permit No.
Chevron Edmonds	Edmonds, WA	
Client	Client Representative	Weather
Envirocon	Charles Bird	Cloudy/Cool
Design Authority (engineer or architect of record)	Design Authority Representative	HWA Project Manager
		Tony Martin
General Contractor	General Contractor Representative	HWA Field Representative
Envirocon	Chuck Hyatt	John H. "Jack" Carlock

FIELD REPORT

SUMMARY OF FIELD TIME SPENT ON PROJECT TODAY:

First Site Visit: Start Travel: 1415 Arrived at Site: 1430 Departed Site: 1515 End Travel: 1530

ACTIVITY BEING INSPECTED: Compaction of Gravel Borrow import and site soil placed as excavation backfill. GENERAL LOCATION: Fill placed as Backfill of Excavation B-1excavation.

DETAILED LOCATION: The approximate locations and elevations tested are summarized on the attached 'Field

Compaction Test Report'.

TYPE OF INSPECTION: Periodic

DETAILS OF PLACEMENT OF THIS MATERIAL: No information was provided regarding lift thickness or placement details except that the material was compacted with a caterpillar CS-563E smooth drum vibratory roller. At the time of my visit both the placement and the compaction efforts for the gravel borrow had been completed to finished grade. HWA INSPECTION ACTIVITIES RELATED TO THIS ITEM: HWA conducted nuclear density testing on the uppermost 10" of the filled area and found that the material met or surpassed the compaction requirement.

CONFORMANCE OF THIS ITEM: To the best of the inspector's knowledge, the item inspected was found in conformance with approved plans, specifications and RFIs.

MISCELLANEOUS ACTIVITIES, OBSERVATIONS AND/OR COMMENTS:

Total time chargeable to this job is 2.0 hours including the time for writing this report.

SIGNATURES:

 Reviewed:

HWA Project Engineer or Reviewer

SUMMARY OF UNRESOLVED ISSUES

Report# Item# Status



Lynnwood, WA 98036 Tel. 425-774-0106

Field Report No.: Date (mm/dd/yy):

FR-055 9/18/2007 HWA Project No.: 2007-132-23

HWA Task No.:

Project Name	Location or Address of Project	Permit No.
Chevron Edmonds	Edmonds, WA	
Client	Client Representative	Weather
Envirocon	Charles Bird	Cloudy/Cool
Design Authority (engineer or architect of record)	Design Authority Representative	HWA Project Manager
		Tony Martin
General Contractor	General Contractor Representative	HWA Field Representative
Envirocon	Chuck Hyatt	John H. "Jack" Carlock

Design Authority (engineer or architect of record)					HWA Project Manager Tony Martin						
General Contractor Envirocon						HWA Field Representative John H. "Jack" Carlock					
FIELD COMPA			TDED	OPT	NILIC	IEAD			Cario	JK	
	ccompa				- NUC	LEAN	IAIC I	пОБ			
PROJECT IMPROVEMENT TESTED:		compa	·····		ort						
	Elev'n		<u> </u>	Lab C	ontrol*		F	ield Te	st	Rela	ative
	or	Probe			ce/Mars			nsity	Moist.	Comp	action
Test Detailed Test Location	Depth B.G.**	Depth	ID #	Max. Dens.	Opt.	Over Size %	Total	Dry	Moist.	Field	Spec
1 Excavation B-1, 1at approximately grid line 47 at D.		(in) 12 in	# AG-4	130.3	7,6	30.0	pcf 132.8	pcf 127.4	% 4.3	% 98	% 90
2 Excavation B-1, 1at approximately grid line 45 at E.	grade	12 in	AG-4	130.3	7.6	30.0	132.0	125.4	5.2	96	90
3											
4											
. 5											
6											
7											
8											
9											
10											
11								CITY AVAILABLE OF A			
12											
13											
Test Method X ASTM D2922/D3017 (soi	l)		ASTM D	2950 (as _l	phalt)			Other:			
Densometer: X Troxler 3440	_Troxler 3	•		Troxler 3	411-B	_		СРИ МС	1-DR-P		
	/ Standard				Moisture	Standard	Count:	624			
*Lab Control: X Standard Proctor	,		Modified				•				
Asphalt Marshall Density COMMENTS: Test locations and elevations are app Accompanying field report provides additional inform current type of fill material being placed. Bolded res	nation. **[Testing Depth B.C	provides 3. indicate	data oni; es depth	y for a sp below gra	ade. Gra	t location	and to a	ı limited d sign finish	epth. grade of	f the

Test Method	X	ASTM D2922/D3	017 (soil)	ASTM D	2950 (asphalt)	Other:
Densometer:	X	Troxler 3440	Troxler 3430		Troxler 3411-B	_CPN MC1-DR-P
	Serial #:	29276	Density Standard Count.:	2552	Moisture Standard Count:	624
*Lab Control:	X	Standard Proctor		Modified	Proctor	
Accompanying fi	eld report	provides addition	are approximate. Testing	provides G. indical	Maximum Theoretical Density (Rice data only for a specific test location es depth below grade. Grade mea dow specified value.	on and to a limited depth.
ĺ	Comple	ted Bv: John H	. "Jack" Carlock		Reviewed By: Tony I	Martin

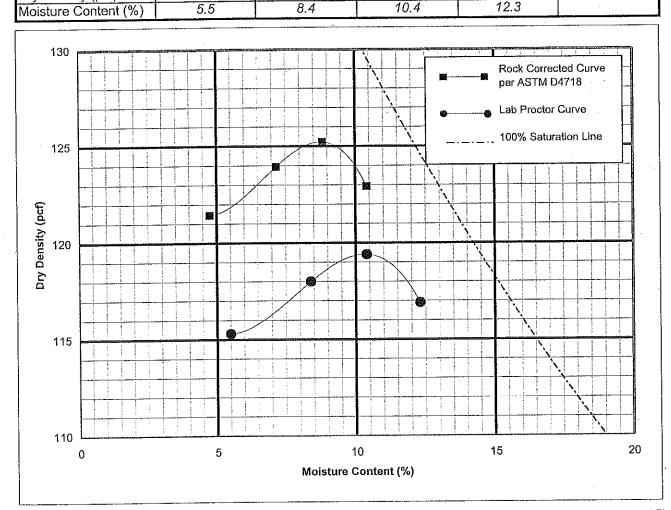
LABORATORY COMPACTION CHARACTERISTICS OF SOIL



12.3

CLIENT: Envirocon	TTANACIEOSCI		LY.			
PROJECT: Chevro				SAMPLE ID:	AG-4	
PROJECT NO: 2007		Sa	mpled By: <i>JHC</i>	Tested By	AAC	
Date Sampled: 9/2/2		Date Received:	9/2/2008	Date Tested: 9/	3/2008	
MATERIAL TYPE OF		•				
Gravel Borrow						
MATERIAL SOURCE	, SAMPLE LOCA	ATION AND DEPTH	l :	t		
Rinker, Everett						
Designation: X AST	M D 698	ASTM D 155	7 Nat	ural Moisture Content	4.8	_%
Method: A	В	XC	Oversize: 10	6.7% retained on	:3/4	in.
Preparation: Dry	X Moist	Rammer: X Au	to Manual	Assumed S.G.	2.65	_
		Toot Do	4-			
		Test Da				G499
Dry Density (pcf)	115.3	118.0	119.4	116.9		

10.4

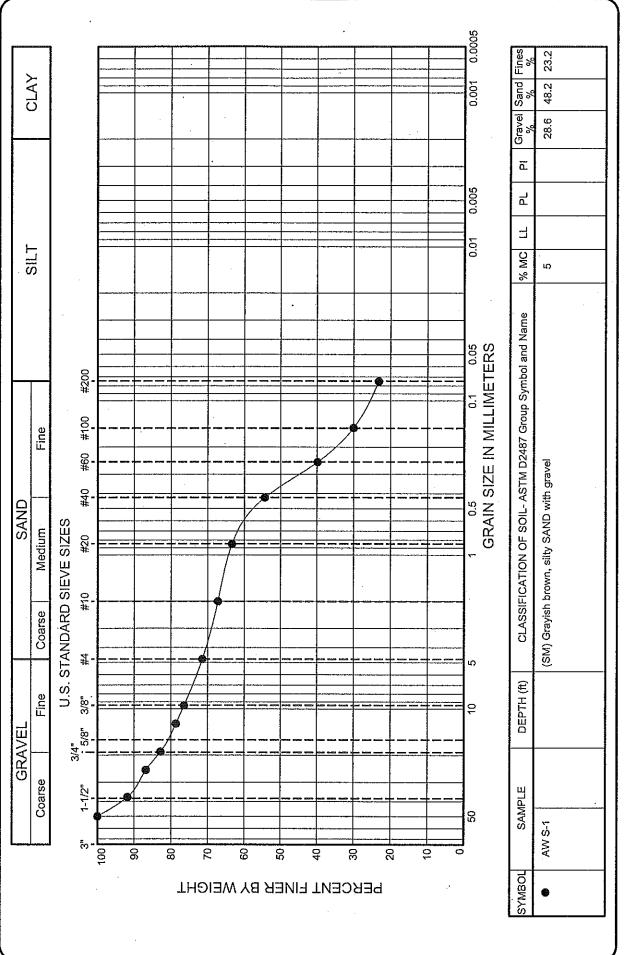


Data Summary*					
Percent Oversize	16.7%				
Max. Dry Density (pcf)*	125.2				
Optimum Moisture (%)*	8.8				

Test Values At Other Oversize Percentages									
0.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%			
119.4	121.1	122.8	124.6	126.4	128.3	130.3			
10.4	9.9	9.5	9.0	8.5	8.1	7.6			

* values corrected for oversize material per ASTM D4718, using assumed Specific Gravity shown and oversize moisture content of 1%

Reviewed By: George Minassian FIGURE 1



PARTICLE-SIZE ANALYSIS OF SOILS METHOD ASTM D422

PROJECT NO.: 2007-132-23

FIGURE:

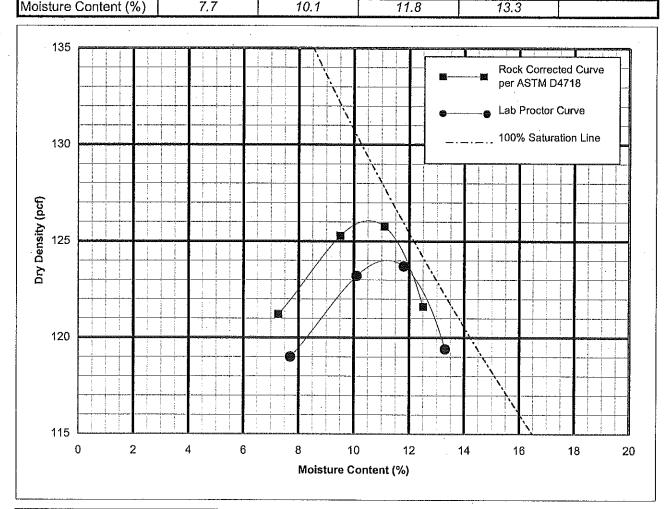
Edmonds, Washington

Chevron Edmonds

HWA GEOSCIENCES INC.

LABORATORY COMPACTION CHARACTERISTICS OF SOIL

CLIENT: Envirocon		ПУУАС	EOSCIE	INCE2 I	INC.		
PROJECT: Chevron	Edmonds			SAMPL	E ID:	AW S-1	1
PROJECT NO: 20071	32-T100	Sa	mpled By: <i>JI</i> -	Te	ested By:	AAC	
Date Sampled: 9/15/2	<u>2008</u>	Date Received:	9/15/2008	Date Te	ested: 9/1	5/2008	
MATERIAL TYPE OR I	DESCRIPTION:						
Grayish brown, silty SA	ND with gravel (SM)					
MATERIAL SOURCE,	SAMPLE LOCAT	ION AND DEPTH	1:			,	
Site Soils from Asphalt	Warehouse Exc	avation Sample Po	oint: On Site S	Stockpile			
Designation: X ASTM	D 698	ASTM D 155	7 N	atural Moisture	Content:	5.3	%
Method: A	в	XC	Oversize:	6.5 % reta	ained on:	3/4	in.
Preparation: Dry	X Moist	Rammer: X Au	to Manua	al Assum	ed S.G.:	2.65	_
		Test Da	ta		, i		
Dry Density (pcf)	119.0	123.2	123.7	119.4			
Moisture Content (%)	7.7	10.1	11.8	13.3			



Data Summary*					
Percent Oversize	6.5%				
Max. Dry Density (pcf)*	126.1				
Optimum Moisture (%)*	10.5				

Test Values At Other Oversize Percentages									
0.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%			
124.0	125.6	127.2	128.8	130.5	132.3	134.1			
11.2	10.7	10.2	9.7	9.2	8.7	8.1			

* values corrected for oversize material per ASTM D4718, using assumed Specific Gravity shown and oversize moisture content of 1%

Reviewed By: George Minassian

FIGURE 2