



Integral Feed Solutions-NIR
253 Koondrook Murrabit Road
Australia
Telephone: +61 447 483 455

Report Date: 06/09/2026
Sample No.: 5N47K

Account No.:
Sampled By: Integral Feed Solutions-NIR
Sampled For:
Description1: Corn Silage

Test Package: Complete NASEM
Feed Type: Whole plant corn
Sub Type: Corn silage

Moisture	63.78%		
Dry Matter	36.22%		
pH	3.79		
		Dry Basis	90% Range*
CP	%DM	7.86	5.80 - 9.00
ADICP	% CP	4.83	6.57 - 15.46
NDICPss	% CP	11.07	
SCP	% CP	83.33	25.02 - 72.00
Ammonia	% CP	9.16	0.00 - 11.76
Total amino acid	%DM	5.59	5.45 - 7.53
Total amino acid	% CP	71.12	71.89 - 89.55
Lysine	% CP	2.16	2.00 - 3.73
Methionine	% CP	1.65	1.18 - 1.88
Isoleucine	% CP	3.31	2.76 - 3.31
Leucine	% CP	8.91	7.91 - 10.37
Valine	% CP	4.71	3.62 - 5.36
Histidine	% CP	1.53	1.37 - 2.46
ADF	%DM	22.98	19.93 - 30.46
aNDF	%DM	38.21	31.64 - 49.20
aNDFom	%DM	37.17	30.67 - 48.10
Lignin	% NDFom	6.38	
Lignin	%DM	2.37	2.43 - 4.43
NDFDom12	% NDFom	40.57	26.60 - 41.53
NDFDom24	% NDFom	60.16	42.83 - 62.27
NDFDom30	% NDFom	65.08	47.40 - 67.59
NDFDom48	% NDFom	68.60	53.27 - 69.65
NDFDom240	% NDFom	81.97	65.58 - 80.59
uNDFom12	%DM	22.09	19.19 - 31.84
uNDFom24	%DM	14.81	13.21 - 23.34
uNDFom30	%DM	12.98	11.38 - 20.95
uNDFom48	%DM	11.67	10.32 - 18.47
uNDFom240	%DM	6.70	6.89 - 12.78
Sugar (ESC)	%DM	0.84	0.54 - 5.66
Sugar (WSC)	%DM	1.01	0.99 - 6.63
Starch	%DM	33.12	19.15 - 41.93
IVSD7-o	% Starch	84.14	51.07 - 78.15
Fat (EE)	%DM	3.54	2.23 - 3.86
Total fatty acids	%DM	2.07	1.49 - 2.61
16:0 Palmitic	% TFA	17.87	
18:0 Stearic	% TFA	1.93	
18:1 Oleic	% TFA	22.22	

18:2 Linoleic	% TFA	49.28	
18:3 Linolenic	% TFA	6.76	
Ash	%DM	4.56	2.81 - 6.19
Ca	%DM	0.23	0.16 - 0.31
P	%DM	0.22	0.19 - 0.28
Mg	%DM	0.17	0.13 - 0.23
K	%DM	1.44	0.77 - 1.35
S	%DM	0.10	0.08 - 0.13
Cl	%DM	0.24	0.17 - 0.44
Lactic	%DM	4.77	0.00 - 7.83
Acetic	%DM	3.45	0.00 - 5.01
Propionic	%DM	0.42	0.00 - 1.33

Corn silage statistics provided for comparison.

Calculations

NFC	%DM	48.21	
NSC	%DM	34.13	
ME - Higgs	MJ/kgDM	11.50	
NDF kd rate MIR_P1	%/hr	5.49	
Starch kd rate MIR_P1T1	%/hr	30.69	
Equine DE	Mcal/lbDM	1.22	
Equine TDN	%DM	66.30	
Adjusted Crude Protein	%DM	7.86	
	ADF	OARDC	MLK06 Proc
TDN 1x	71.75	73.50	77.49
ME	MJ/kg	10.94	
Nel 3x	MJ/kg	6.88	7.03
Neg	MJ/kg	4.31	4.57
Nem	MJ/kg	6.85	7.14
Milk per ton	kg/tonne		1,847
		MLK06 NonProc	MLK24
TDN 1x		75.50	
ME	MJ/kg		
Nel 3x	MJ/kg	6.71	7.19
Neg	MJ/kg	5.13	
Nem	MJ/kg	7.79	
Milk per ton	kg/tonne	1,766	1,595



Integral Feed Solutions-NIR
253 Koondrook Murrabit Road
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Report Date: 06/09/2026
Sample No.: 5N47J

Account No.:
Sampled By: Integral Feed Solutions-NIR
Sampled For:
Description1: Lucerne Silage

Test Package: Complete NASEM
Feed Type: Haylage - Legume
Sub Type: Alfalfa haylage

Moisture	56.86%		
Dry Matter	43.14%		
pH	4.63		
		Dry Basis	90% Range*
CP	%DM	23.16	16.91 - 24.58
ADICP	% CP	4.79	4.62 - 12.57
NDICPss	% CP	12.65	
SCP	% CP	73.40	37.82 - 67.46
Ammonia	% CP	7.47	0.00 - 28.31
Total amino acid	%DM	16.21	11.13 - 18.30
Total amino acid	% CP	69.99	63.07 - 82.43
Lysine	% CP	3.97	3.12 - 4.80
Methionine	% CP	1.42	1.20 - 1.80
Isoleucine	% CP	3.97	2.82 - 3.76
Leucine	% CP	6.17	5.05 - 6.97
Valine	% CP	4.84	4.29 - 5.16
Histidine	% CP	1.34	1.21 - 1.70
ADF	%DM	25.90	27.22 - 40.43
aNDF	%DM	31.02	32.99 - 47.81
aNDFom	%DM	29.04	29.73 - 45.38
Lignin	% NDFom	18.53	
Lignin	%DM	5.38	6.12 - 10.06
NDFDom12	% NDFom	42.84	29.96 - 50.30
NDFDom24	% NDFom	50.79	30.31 - 57.76
NDFDom30	% NDFom	51.72	36.23 - 58.81
NDFDom48	% NDFom	54.24	41.38 - 61.21
NDFDom240	% NDFom	55.82	44.45 - 66.57
uNDFom12	%DM	16.60	15.89 - 29.25
uNDFom24	%DM	14.29	13.83 - 28.55
uNDFom30	%DM	14.02	13.37 - 27.00
uNDFom48	%DM	13.29	12.88 - 25.46
uNDFom240	%DM	12.83	11.84 - 23.68
Sugar (ESC)	%DM	4.04	0.99 - 6.90
Sugar (WSC)	%DM	5.84	1.36 - 8.20
Total sugars	%DM	4.46	0.76 - 5.85
Starch	%DM	0.96	0.20 - 3.91
Fat (EE)	%DM	3.85	2.47 - 4.43
Total fatty acids	%DM	1.74	1.08 - 3.16
16:0 Palmitic	% TFA	22.41	21.97 - 33.68

*ND = Not Detected

18:0 Stearic	% TFA	4.02	3.65 - 7.06
18:1 Oleic	% TFA	2.87	2.63 - 6.59
18:2 Linoleic	% TFA	21.84	20.89 - 30.61
18:3 Linolenic	% TFA	47.13	21.96 - 47.26
Ash	%DM	10.28	9.01 - 14.41
Ca	%DM	1.25	1.02 - 1.60
P	%DM	0.32	0.29 - 0.43
Mg	%DM	0.29	0.24 - 0.40
K	%DM	3.21	2.13 - 3.53
S	%DM	0.29	0.19 - 0.32
Cl	%DM	0.77	0.21 - 1.18
Lactic	%DM	4.58	0.00 - 9.74
Acetic	%DM	2.35	0.00 - 6.28
Propionic	%DM	ND	0.00 - 1.47
Butyric	%DM	ND	0.00 - 0.95

Alfalfa haylage statistics provided for comparison.

Calculations

NFC	%DM	37.71	
NSC	%DM	6.80	
RFV		206.09	
RFQ		226.52	
ME - Higgs	MJ/kgDM	10.98	
NDF kd rate MIR_P1	%/hr	9.55	
Equine DE	Mcal/lbDM	0.99	
Equine TDN	%DM	52.80	
Adjusted Crude Protein	%DM	23.16	

		ADF	OARDC	MLK13
TDN 1x		68.72	65.74	69.60
ME	MJ/kg		10.52	
Nel 3x	MJ/kg	6.56	6.24	6.56
Neg	MJ/kg	3.65	4.24	4.66
Nem	MJ/kg	6.11	6.77	7.24
Milk per ton	kg/tonne			1,706



Integral Feed Solutions-NIR
253 Koondrook Murrabit Road
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Report Date: 06/09/2026
Sample No.: 5N47L

Account No.:
Sampled By: Integral Feed Solutions-NIR
Sampled For:
Description1: Cereal Silage

Test Package: Complete NASEM
Feed Type: Small Grain Silage
Sub Type: Small grain silage

Moisture	61.62%		
Dry Matter	38.38%		
pH	4.21		
		Dry Basis	90% Range*
CP	%DM	11.53	8.97 - 21.92
ADICP	% CP	4.60	4.13 - 12.73
NDICPss	% CP	10.23	
SCP	% CP	81.87	26.93 - 69.53
Ammonia	% CP	4.34	0.00 - 21.11
Total amino acid	%DM	8.33	6.01 - 16.58
Total amino acid	% CP	72.25	57.37 - 94.12
Lysine	% CP	3.90	1.39 - 6.30
Methionine	% CP	1.30	1.11 - 2.59
Isoleucine	% CP	3.21	2.83 - 4.61
Leucine	% CP	4.86	4.85 - 8.16
Valine	% CP	4.25	3.96 - 4.63
Histidine	% CP	1.39	0.19 - 2.15
ADF	%DM	28.22	27.39 - 43.83
aNDF	%DM	45.88	38.79 - 65.43
aNDFom	%DM	43.55	34.83 - 60.05
Lignin	% NDFom	6.34	
Lignin	%DM	2.76	2.88 - 7.64
NDFDom12	% NDFom	41.81	25.32 - 51.98
NDFDom24	% NDFom	54.65	37.73 - 79.09
NDFDom30	% NDFom	57.59	40.54 - 82.28
NDFDom48	% NDFom	63.93	45.76 - 83.30
NDFDom240	% NDFom	71.37	55.33 - 88.04
uNDFom12	%DM	25.34	20.25 - 46.90
uNDFom24	%DM	19.75	7.29 - 33.82
uNDFom30	%DM	18.47	6.33 - 33.30
uNDFom48	%DM	15.71	6.26 - 28.85
uNDFom240	%DM	12.47	5.04 - 22.07
Sugar (ESC)	%DM	12.22	0.48 - 6.06
Sugar (WSC)	%DM	13.23	2.31 - 14.70
Starch	%DM	2.55	0.10 - 9.41
Fat (EE)	%DM	3.70	2.52 - 4.99
Total fatty acids	%DM	1.04	0.90 - 2.82
16:0 Palmitic	% TFA	20.19	
18:0 Stearic	% TFA	2.88	

*ND = Not Detected

18:1 Oleic	% TFA	3.85	
18:2 Linoleic	% TFA	19.23	
18:3 Linolenic	% TFA	51.92	
Ash	%DM	9.26	8.68 - 16.67
Ca	%DM	0.24	0.30 - 1.17
P	%DM	0.26	0.25 - 0.47
Mg	%DM	0.14	0.13 - 0.42
K	%DM	1.96	1.75 - 3.99
S	%DM	0.16	0.12 - 0.30
Cl	%DM	0.67	0.18 - 1.17
Lactic	%DM	5.35	0.00 - 10.80
Acetic	%DM	1.48	0.00 - 5.72
Propionic	%DM	ND	0.00 - 1.48
Butyric	%DM	ND	0.00 - 0.94

Mixed SGS statistics provided for comparison.

Calculations

NFC	%DM	34.80		
NSC	%DM	15.78		
RFV		135.68		
RFQ		149.95		
ME - Higgs	MJ/kgDM	10.24		
NDF kd rate MIR_P1	%/hr	5.88		
Equine DE	Mcal/lbDM	0.99		
Equine TDN	%DM	52.56		
Adjusted Crude Protein	%DM	11.53		
		ADF	OARDC	MLK13
TDN 1x		67.44	65.18	64.85
ME	MJ/kg		9.90	
Nel 3x	MJ/kg	6.42	6.18	6.11
Neg	MJ/kg	3.10	3.76	3.71
Nem	MJ/kg	5.50	6.23	6.18
Milk per ton	kg/tonne			1,511



Integral Feed Solutions-NIR
253 Koondrook Murrabit Road
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Report Date: 05/26/2026
Sample No.: 5MFXJ

Account No.:
Sampled By: Integral Feed Solutions-NIR
Sampled For:
Description1: Wheat Grain

Test Package: Complete NASEM
Feed Type: Small Grain
Sub Type: Wheat grain

Moisture	9.03%		
Dry Matter	90.97%		
		Dry Basis	90% Range*
CP	%DM	13.01	9.93 - 17.52
ADICP	% CP	3.15	2.53 - 9.58
SCP	% CP	44.58	8.52 - 41.08
Total amino acid	%DM	12.77	
Total amino acid	% CP	98.16	
Lysine	% CP	2.54	
Methionine	% CP	1.92	
Isoleucine	% CP	3.15	
Leucine	% CP	6.53	
Valine	% CP	4.07	3.74 - 4.62
Histidine	% CP	2.23	
Crude Fiber	%DM	3.55	
ADF	%DM	4.14	2.99 - 8.78
aNDF	%DM	11.03	10.55 - 15.21
aNDFom	%DM	10.51	10.02 - 14.36
Lignin	% NDFom	15.22	
Lignin	%DM	1.60	0.56 - 3.00
NDFDom12	% NDFom	20.27	23.23 - 46.87
uNDFom12	%DM	8.38	5.91 - 10.35
Starch	%DM	62.40	49.37 - 65.07
Fat (EE)	%DM	1.88	1.60 - 3.79
Total fatty acids	%DM	1.70	
16:0 Palmitic	% TFA	18.82	
18:0 Stearic	% TFA	2.35	
18:1 Oleic	% TFA	10.59	
18:2 Linoleic	% TFA	61.76	
18:3 Linolenic	% TFA	4.71	
Ash	%DM	2.42	1.49 - 5.86
Ca	%DM	0.07	0.05 - 0.13
P	%DM	0.39	0.31 - 0.49
Mg	%DM	0.14	0.13 - 0.19
K	%DM	0.53	0.33 - 0.60
S	%DM	0.16	0.11 - 0.21

Wheat grain statistics provided for comparison.

ME - Higgs	MJ/kgDM	13.73	
Adjusted Crude Protein	%DM	13.01	
	ADF		OARDC
TDN 1x	85.15		84.51
ME	MJ/kg		12.77
Nel 3x	MJ/kg	8.24	8.16
Neg	MJ/kg	5.87	5.90
Nem	MJ/kg	8.64	8.68

Calculations

NFC %DM 73.05



Integral Feed Solutions-NIR
253 Koondrook Murrabit Road
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Report Date: 05/22/2026
Sample No.: 5LZW4

Account No.:
Sampled By: Integral Feed Solutions-NIR
Sampled For:
Description1: Canola Meal

Test Package:
Complete NASEMIMold and Yeast Count
Feed Type: Oilseeds & byproducts
Sub Type: Canola meal

Moisture	10.32%		
Dry Matter	89.68%		
		Dry Basis	90% Range*
CP	%DM	43.62	35.55 - 44.88
ADICP	% CP	4.81	4.57 - 8.47
NDICPss	% CP	8.25	
Ross UCP	% CP	14.42	8.41 - 21.79
Total amino acid	%DM	38.23	29.28 - 38.57
Total amino acid	% CP	87.64	75.30 - 90.22
Lysine	% CP	5.07	4.60 - 5.65
Methionine	% CP	1.93	1.81 - 1.99
Isoleucine	% CP	3.26	2.85 - 3.34
Leucine	% CP	6.56	6.14 - 6.81
Valine	% CP	4.47	4.39 - 5.39
Histidine	% CP	2.48	2.22 - 2.86
Crude Fiber	%DM	12.50	11.68 - 14.46
ADF	%DM	20.33	15.44 - 23.28
aNDF	%DM	25.52	19.85 - 30.18
aNDFom	%DM	21.85	18.50 - 27.70
NDFDom12	% NDFom	34.28	19.86 - 50.31
NDFDom30	% NDFom	37.67	31.42 - 55.45
NDFDom48	% NDFom	39.50	31.94 - 59.66
NDFDom240	% NDFom	46.82	43.50 - 65.53
uNDFom12	%DM	14.36	10.37 - 18.73
uNDFom30	%DM	13.62	9.30 - 15.44
uNDFom48	%DM	13.22	8.31 - 14.76
uNDFom240	%DM	11.62	7.39 - 13.01
Fat (EE)	%DM	3.39	2.13 - 16.60
Total fatty acids	%DM	2.54	
16:0 Palmitic	% TFA	8.27	
18:0 Stearic	% TFA	2.36	
18:1 Oleic	% TFA	50.79	
18:2 Linoleic	% TFA	25.98	
18:3 Linolenic	% TFA	10.63	
Ash	%DM	7.85	6.41 - 8.72

Canola meal statistics provided for comparison.

ME - Higgs	MJ/kgDM	12.65	
NDF kd rate MIR_P1	%/hr	5.53	
Adjusted Crude Protein	%DM	43.62	
	ADF		OARDC
TDN 1x			68.76
ME	MJ/kg		11.88
Nel 3x	MJ/kg	8.30	6.55
Neg	MJ/kg	5.32	5.27
Nem	MJ/kg	8.01	7.94

Calculations

NFC	%DM	26.74
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