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# EVALUATION OF AGRO-INDUSTRIAL CHARACTERISTICS OF BEYLAGAN REGION'S LAND COVER ON THE EXAMPLE OF 1ST SHAHSEVAN VILLAGE OF BEYLAGAN REGION

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## **ABSTRACT**

It was determined by the research that the object of research was excavated plots of land with a total area of 1776.99 ha, and their morphological features were described by genetic layers. yes; Clean pasture-147.58ha; Reed pasture-6.83 ha; Shrub pasture - 4.25 ha; Other lands-942.10 ha; The area set aside was 7.2 hectares. Based on the results of field research and laboratory analysis, a soil map was compiled on topographic bases and an explanatory report was written. Professor R.H.Mammadov's scale was used to determine the granulometric composition of soils here. Natural-economic features of the area, including geographical position, relief, agro-climatic elements were studied, soil cover; vegetation. The role of vegetation in the process of soil formation and formation of soil cover, increase of soil fertility with the formation of organic matter depends on the density of vegetation, maintenance of normal soil moisture, reduction of water washing effect, prevention of formation and development of soils and erosion elm, garatikan shrubs, licorice, birch, thyme, chicory, etc. are widely spread in the area from shrubs, suitability of the area for use for grain crops; Soil-forming rocks, etc., as well as the great role of the chemical composition of the parent rock in the process of soil formation have been widely studied.

**Keywords:** Soil cover, soil-forming rocks, soil organic composition, field-soil research, laboratory analysis, gray-meadow, light gray-meadow soils; heavy clay, light clay, etc.

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# **INTRODUCTION**

With the adoption of the Law "On Land Reform" on August 2, 1996, which is the basis of agrarian reform, large-scale field land survey work was accelerated in the Republic. Rules of land survey Prepared in accordance with the Law of the Republic of Azerbaijan, Decree No. 516 of the President of the Republic of Azerbaijan dated May 4, 2015 on amendments to the Decree of the President of the Republic of Azerbaijan No. 116 dated May 4, 2015 "On ensuring the activities of the State Committee for Property Affairs" and other normative legal acts. The research is carried out by the Cadastre and Land Management Project-Research Center subordinated to the Real Estate Cadastre and Address Register Service under the State Committee for Property Affairs of the Republic of Azerbaijan. In accordance with the requirements of the State Program on Socio-Economic Development of the Regions of the Republic of Azerbaijan in 2014-2018, the establishment of an electronic land registration system in the Republic, regardless of the type of ownership, is used to improve the fertility, restoration, protection and use of agricultural lands. is one of the issues on the agenda now. By the Decree of the President of the Republic of Azerbaijan No. 818 dated March 7, 2016 "On additional measures in the field of regulation of land relations in the Republic of Azerbaijan", a number of tasks were set before the State Committee for Property Affairs of the Republic of Azerbaijan. These include the creation of an electronic land cadastre information system and the compilation of a digital cadastral map by conducting electronic registration and mapping of state, municipal and privately owned lands.

## MATERIAL AND METHOD

The total area of the surveyed area was 2719.09 ha, research work was carried out in 1776.99 ha.

The area is divided into the following natural farms:

- Planting 1611.09 ha
- Dinc 7.24 ha
- Net grazing 147.58 ha
- Reed pasture 6.83 ha
- Bush pasture 4.25 ha
- Other lands 942.10 ha

During the study, soil sections were excavated in the area and morphological features were described in genetic layers. Soil samples were taken from the excavated sections and analyzed in the Center's laboratory by the following methods:

- 1. Hygroscopic moisture by thermal method
- 2. Granulometric composition by Kaczynski's pipette method
- 3. General humus by the method of Tyurin
- 4. Total nitrogen By calculation
- 5. Carbonate With a calcimeter device
- 6. Absorbed Ca and Mg by Ivanov method
- 7. Absorbed Na by Hedroyts method
- 8. pH water suspension with pH meter
- 9. Full and brief water weight by Hedroyts method
- 10. Dry residue by weight

Thus, based on the results of field research and laboratory analysis, a soil map was prepared on a topographic basis and a report was written. Archival materials were used in compiling the land map and writing the report.

Professor RH Mammadov's scale was used to determine the granulometric composition.

### Natural conditions

Geographical position. First Shahsevan village Administrative Territorial District of Beylagan region, State Land Fund in the north, Second Shahsevan village Administrative Territorial District in the east, Fuzuli district land in the south, Amirzeyidli village Administrative Territorial District in the south-west, State Land Fund in the west and Mil settlement settlement Administrative Territorial and Milabad settlement is bordered by the lands of the Administrative Territorial District. Relief. Relief, as a structure of the earth's surface, is directly involved in the formation of soil cover as a factor in soil formation.

It plays an important role in changing chemical and biological processes, hydrothermal regime and microclimate. Thus, the distribution of solar energy and atmospheric sediments is directly related to relief. The relief of Birinci Shahsevan village consists of sloping and slightly sloping plains. Climate. Climate is one of the important factors as a factor in soil formation. Beylagan region is located in the south of Mil plain.

The climate of the area belongs to the type of temperate-hot semi-desert and dry steppes with dry summers. This type of climate is characterized by very low and low humidity, mild winters and dry summers.

The average annual air temperature is 14.0oC. The average monthly temperature in January is 1.8oC, and the average monthly temperature in July is 26.0oC. The average annual temperature of the soil surface is 18 oC, fluctuating between 2-34  $^{\circ}$ C per year.

Met		А	Aylar											
eo st. nam e	Climate indicators	Ι	II	Ш	IV	v	VI	VII	VIII	IX	Х	XI	XII	illik
B E Y L A. Q A N	The average temperature of the air, with <sup>0</sup> C	1.8	3.7	6.9	12.5	19.0	23.3	26.0	25.4	21.1	15.4	9.2	4.2	14.0
	Average relative humidity, in%	81	79	78	73	68	60	58	62	70	76	82	82	72
	Precipitation, in mm	31	28	32	30	28	26	12	12	21	37	30	25	312
	Possible evaporation, in mm	25	28	44	68	107	151	180	154	105	64	36	28	990
	The average temperature of the soil surface	2	5	9	16	25	30	34	32	25	18	10	4	18

 Table 1: Average monthly and annual information onclimate indicators

**Vegetation.** Vegetation is a key factor in the process of soil formation and the formation of soil cover. The increase in soil fertility with the formation of organic matter depends on the density of vegetation. Maintaining normal soil moisture, reducing the washing effect of water, preventing the formation and development of the erosion process are closely related to vegetation. In the area we studied, shrubs include elm, blackberry bushes, and grasses such as licorice, birch, birch, chicory, etc. spread. The sown areas of the area are used for grain crops.

Soil-forming rocks. Soil-forming rocks affect the granulometric composition, chemical and mineralogical composition of the soil, causing the formation of soil profile and

genetic layers. The chemical composition of the parent rock plays an important role in the process of soil formation. The richer the parent rock, the better the quality of the soil formed on it. Thus, the areas we studied consist of sloping and slightly sloping plains, and the soils are formed on proluvial sediments.

## **RESULT**

### Ground cover

According to the results of field research and laboratory analysis, the following soil types and subtypes are widespread in the area.

- 1. Gray meadow
- 2. Light gray meadow

### 1. Gray-meadow soils

Gray-meadow lands cover 458.01 ha or 16.84% of the total area in the eastern and southern parts of Birinci Shahsevan village. Depending on what the granulometric composition of these soils and the thickness of the soil layer; 1) divided into heavy clayey, thick, gray-meadow species.

In order to get acquainted with the characteristic morphological features of the studied area, we give a field description of section 22 dug in the field south of Garavelli village.

- 0-23 cm gray, large topavari, heavy clayey, soft, roots and rhizomes, boils, less moisture, clear transition.
- 23-52 cm light gray, topavari, light clay, low kip, insect tracts, boils, less moisture, gradual transition
- 52-94 cm grayish, topavari, light clay, low kip, and rust stains, boiling moisture, gradual transition.
- 94-123 cm grayish, small topavari, light clay, low kip, white spots, boils, gradual transition to moisture.
- 123-165 cm straw, indistinguishable, light clayey, soft, white spots, boils, damp

It is clear from the morphological description of the section that the color of these soils is gray in the upper layer, light gray and gray in the middle layer, and straw in the last layer. The structure is not selected on the top layer of large topavari, topavari and small topavari on the middle layer, and on the last layer. The granulometric composition is heavy clay in the first layer, light clay in the other layers. The density varies from soft to soft on the top layer, light to soft on the middle layer, and soft on the last layer. Roots and rhizomes, insect tracts, rust spots and white spots are found in new derivatives and nutrients. Hygroscopic humidity is low humidity in the top layer, less moisture and humidity in the middle layers, and moisture in the last layer. The transitions in the genetic layers are clear and gradual.

According to the results of laboratory analysis, the granulometric composition of gray-meadow soils is heavily clayey. However, it is found in light clay in the profile. Thus, the amount of physical clay in these soils is 45.18-49.08% in the upper layers, 43.36-53.20% in the profile.

The hygroscopic humidity of the main components varies between 4.6-5.7%. The total amount of humus is 2.09-2.10% in the upper layers and 0.69-2.10% in the one-meter layer. According to the

total humus, the total nitrogen content in the profile is 0.08-0.17%. The pH in the water suspension is 8.10-8.37 units, which indicates that the soil is alkaline. The total amount of absorbed bases in gray-meadow soils is 28.50-35.43 mg. The amount of Ca cation is 66.50-70.18%, Mg cation is 27.19-31.33%, and Na cation is 2.17-2.85% of the total absorbed bases (Table 2).

Cut	Depth	Winning bases, in mg.ekv			Swallowed of the basics	From the sum of the wonbases,%- with						
JNG	mem	Ca	Mg	Na	in total mg.ekv	Ca	Mg	Na				
1	2	3	4	5	6	7	8	9				
Heavy clayey, thick, gray-meadow												
22	0-23	24.00	10.63	0.80	35.43	67.74	30.00	2.26				
	23-52	21.50	10.13	0.70	32.33	66.50	31.33	2.17				
75	0-23	20.75	8.25	0.85	29.85	69.51	27.64	2.85				
	23-50	20.00	7.75	0.75	28.50	70.18	27.19	2.63				

Table 2. The amount of bases absorbed in the gray-meadow soils (absolute% in dry land	
Table 7. The amount of bases absorbed in the gray-meadow solis(absolute% in dry land	1
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1 a D C 2, $1 D C a D D D D C C a D D D C C D C D C C D C C C C$	u,

### 2. Light gray-meadow soils

Light gray-meadow lands cover 1318.98 ha or 48.51% of the total area, spreading in different parts of Birinci Shahsevan village PPP.

These soils are divided into the following types according to their granulometric composition and thickness of the soil layer.

- 1. Light clay, thick, light gray-meadow
- 2. Heavy clayey, thick, light gray-meadow

In order to get acquainted with the characteristic morphological features of the studied area, we give a field description of section 16 dug in the field north of Birinci Shahsevan village.

- 0-21 cm light gray, lizard, light clay, less kip, roots and rhizomes, boiling, dry, clear transition.
- 21-49 cm light gray, large topavari, light clay, kip, insect tracks, boils, less moisture, gradual transition
- 49-88 cm grayish, topavari, light clay, low kip, rust stains, boils less moisture, the transition is gradual.
- 88-120 cm straw, small clumps, heavy clay, soft, white spots, boils, little moisture transition gradually.
- 120-161 cm straw, indistinguishable, heavy clayey, soft, white spots, boils, gradual transition to moisture

It is clear from the morphological description of the section that the color of these soils is light gray in the upper layer, light gray in the middle layers, grayish and straw, and the last layer is straw. The structure is clustered in the upper layer, large topavari, topavari and small topavari in the middle layers, and not selected in the last layer. The granulometric composition is light clay in the first layer, light clay and heavy clay in the middle layers, and heavy clay in the last layer. The consistency is less kip in the upper layers, less kip in the middle layers, kip and soft, and soft in the last layer. Roots and rhizomes, insect tracts, rust spots and white spots are found in new derivatives and nutrients. Hygroscopic moisture is dry in the upper layer, slightly moist in the

middle layers, and moist in the last layer. The transitions in the genetic layers are clear and gradual.

According to the results of laboratory analysis, the granulometric composition of light gray-meadow soils is light clayey and heavy clayey. Thus, the amount of physical clay in these soils is 42.20-45.12% in the upper layers, 40.52-46.08% in the profile.

The hygroscopic humidity of the main components varies between 4.2-4.8%. The amount of total humus is 1.68-1.93% in the upper layers and 0.69-1.93% in the one-meter layer. According to the total humus, the total nitrogen content in the profile is 0.08-0.16%. The pH in the water suspension is 8.28-8.35 units, which indicates that the soils are alkaline. The total amount of absorbed bases in light gray-meadow soils is 31.90-46.30 mg. The amount of Ca cation is 64.26-70.22%, Mg cation is 26.69-32.92% and Na cation is 2.63-3.10% of the total absorbed bases (Table 3).

Cut №	Depth in cm	Winnii	ng bases, in n	ng.ekv	Swallowed of the basics	From the sum of the won bases, %-with			
	mem	Ca	Mg	Na	in total mg.ekv	Ca	Mg	Na	
1	2	3	4	5	6	7	8	9	
Light clay, thick,	light gray-meadow	7							
6	0-25	20.38	10.00	0.90	31.28	65.15	31.97	2.88	
0	25-51	20.13	9.00	0.80	29.93	67.26	30.07	2.67	
16	0-21	19.50	8.75	0.90	29.15	66.90	30.02	3.09	
10	21-49	23.00	12.25	1.05	36.30	63.36	33.75	2.89	
12	0-24	20.50	8.13	0.85	29.48	69.54	27.58	2.88	
42	24-55	22.25	10.25	0.85	33.35	66.72	30.73	2.55	
56	0-21	24.25	9.63	0.80	34.68	69.93	27.77	2.31	
50	21-50	23.00	10.00	0.85	33.85	67.95	29.54	2.51	
Heavy clayey, th	ick, light gray mea	dow							
20	0-23	20.13	8.62	0.95	29.70	67.78	29.02	3.49	
30	23-48	21.63	8.75	1.10	31.48	68.71	27.80	3.20	
63	0-25	24.25	9.63	0.70	32.58	74.43	23.42	2.15	
05	25-54	22.00	9.00	0.70	31.70	69.40	28.39	2.21	

### Table 3: The amount of bases absorbed in light gray-meadow soils(absolute% in dry land)

## **CONCLUSION**

Table 4: Results of complete, brief water absorption and dry residue analysis of non-saline soils (necessarily on dry land, in% / eq)

<b>C</b> (	Depth		An	ions			Dry		
N <sub>0</sub>	in cm	CO <sub>3</sub>	HCO <sub>3</sub>	CL	SO4	Ca	Mg	Na + The difference according to	Residue %-with
1	2	3	4	5	6	7	8	9	10
Light clay li	ght gray-meadow	(chlorinate	d-sulfate)						
	0-25		$\frac{0.043}{0.70}$	$\frac{0.018}{0.50}$	$\frac{0.140}{2.91}$	$\frac{0.022}{1.12}$	$\frac{0.006}{0.50}$	$\frac{0.057}{2.49}$	0.295
6	25-51		$\frac{0.046}{0.75}$	$\frac{0.031}{0.87}$	$\frac{0.170}{3.54}$	$\frac{0.027}{0.50}$	$\frac{0.006}{0.50}$	$\frac{0.076}{3.29}$	0.368
	51-93		$\frac{0.040}{0.65}$	$\frac{0.027}{0.75}$	$\frac{0.155}{3.23}$	$\frac{0.022}{1.12}$	$\frac{0.008}{0.63}$	0.066 2.88	0.330

	93-124	0.043	0.022	0.131	0.020	0.006	0.059	0.299
		0.70	0.62	2.73	1.00	0.50	2.55	
	124-163	0.037	0.022	2.58	1.00	$\frac{0.004}{0.37}$	2.43	0.276
		0.00	0.01	1.00	1.00	0.07	2.1.0	
	0-24	0.046	0.018	0.118	0.020	0.004	0.054	0.275
	0.24	0.75	0.50	2.46	1.00	0.37	2.34	0.275
	24-55	$\frac{0.046}{0.75}$	$\frac{0.013}{0.37}$	$\frac{0.112}{7.33}$	$\frac{0.015}{0.75}$	$\frac{0.003}{0.25}$	2.45	0.259
10	55.04	0.043	0.018	0.118	0.017	0.004	0.055	0.262
42	55-94	0.70	0.50	2.46	0.87	0.38	2.41	0.263
	94-123	0.043	0.022	0.102	0.017	$\frac{0.004}{0.20}$	0.054	0.260
		0.043	0.02	0.115	0.017	0.003	0.057	
	123-159	0.70	0.50	2.39	0.87	0.25	2.47	0.266
	0-21	$\frac{0.040}{0.65}$	$\frac{0.027}{0.75}$	$\frac{0.128}{2.66}$	0.015	$\frac{0.004}{0.27}$	$\frac{0.057}{2.47}$	0.259
		0.043	0.022	0.135	0.020	0.006	0.063	
	21-50	0.70	0.62	2.81	1.00	0.50	2.76	0.312
56	50-92	0.046	0.018	0.120	0.020	0.004	0.055	0.274
		0.75	0.50	2.50	1.00	0.37	2.38	
	92-119	$\frac{0.043}{0.70}$	0.37	2.75	1.12	0.38	2.57	0.298
	119-157	0.046	0.018	0.130	0.017	0.008	0.057	0.288
	119-137	0.75	0.50	2.71	0.87	0.63	2.46	0.288
	0.05	0.046	0.009	0.048				0.145
	0-25	0.75	0.25	1.01				0.145
	25-50	0.049	0.013	0.075				0.225
3		0.043	0.013	0.111				
	50-100	0.70	0.37	2.30				0.332
	100-150	0.046	0.013	0.117				0.350
		0.75	0.37	2.43				
		0.043	0.018	0.140				0.120
	0-25	0.70	0.50	2.91				0.420
	25-50	0.043	0.018	0.108				0.324
10		0.046	0.027	0.060				
	50-100	0.75	0.75	1.25				0.180
	100-150	0.046	0.022	0.052				0.155
		0.75	0.62	1.08				
	0.05	0.043	0.027	0.050				0.450
	0-25	0.70	0.75	1.04				0.150
	25-50	0.040	0.022	0.080				0.240
13		0.046	0.02	0.106				
	50-100	0.75	0.50	2.20				0.317
	100-150	0.046	0.018	0.110				0.330
		0.75	0.50	2.29				
	0.05	0.043	0.022	0.129				0.207
	0-25	0.70	0.62	2.69				0.387
	25-50	0.046	0.018	0.109				0.328
15		0.75	0.018	0.117				
	50-100	0.80	0.50	2.43				0.350
	100-150	0.046	0.013	0.097				0.290
		0.75	0.37	2.01				
	0.25	0.043	0.022	0.110	<u> </u>			0.220
	0-25	0.70	0.62	2.29				0.330
	25-50	$\frac{0.046}{0.75}$	0.022	$\frac{0.123}{257}$				0.370
21		0.75	0.02	0.134				0.455
	50-100	0.80	0.75	2.79				0.402
	100-150	0.046	0.022	0.139				0.418
		0.75	0.62	2.90				
	0.07	0.046	0.022	0.128				0.205
54	0-25	0.75	0.62	2.67				0.385
54	25-50	0.043	0.013	0.133				0.400
1		0.70	0.37	2.78	1		I	1

	50-100		0.046	0.018	0.103				0.310
	30-100		0.75	0.50	2.15				0.310
	100-150		$\frac{0.043}{0.70}$	0.018	0.072				0.215
			0.70	0.50	1.49				
			0.043	0.022	0.105				
	0-25		0.70	0.62	2.19				0.315
	25.50		0.040	0.018	0.101				0.202
58	25-50		0.65	0.50	2.10				0.302
50	50-100		0.043	0.022	0.088				0.265
			0.70	0.62	1.84				
	100-150		$\frac{0.043}{0.70}$	$\frac{0.022}{0.62}$	$\frac{0.080}{1.67}$				0.240
			0.70	0.02	1.07				
-	0-25								0.332
1	25-50								0.290
	50-100								0.345
	0-25								0.497
2	25-50								0.348
	50-100								0.245
	0.25								0.207
4	25-50			<u> </u>					0.297
-	50-100								0.240
	20100	1			1				0.210
	0-25		1					1	0.447
5	25-50	t		1	İ	1	1		0.395
	50-100								0.328
	0-25								0.440
7	25-50								0.350
	50-100								0.280
	0.25								0.503
11	25-50			-	-				0.595
11	50-100								0.035
	50 100								01100
	0-25								0.485
18	25-50								0.405
	50-100								0.335
	0-25								0.570
19	25-50			-	-			-	0.385
	30-100								0.260
	0-25								0.367
20	25-50								0.318
	50-100								0.265
-									
	0-25								0.415
24	25-50								0.315
	50-100	ļ			ļ				0.240
	0.25								0.542
42	0-25								0.542
43	50-100								0.480
	50-100								0.245
	0-25								0.237
47	25-50								0.200
	50-100								0.195
	0-25								0.150
50	25-50	ļ			ļ				0.190
	50-100								0.244
	0.25								0.457
51	0-25								0.457
51	50-100			<u> </u>					0.390
	50-100								0.512
	0-25								0.350
52	25-50					1		1	0.425
	50-100		l	1		1			0.310
			İ		1	1	İ		İ

	0-25								0.395
53	25-50								0.420
55	50,100								0.420
	50-100								0.375
	0-25								0.392
55	25-50								0.408
	50-100								0.320
						1			
	0.25								0.160
	0-23								0.160
57	25-50								0.200
	50-100								0.175
	0-25								0.432
59	25-50								0.350
57	50 100					1			0.350
T 1 / 1 1	30-100	16 ( 1)							0.400
Light clay	ight gray-meadow (s	suffated)	0.040	0.010	0.140	0.020	0.000	0.040	
	0-21		0.040	0.013	0.112	0.020	0.003	0.048	0.246
	0.21		0.65	0.37	2.33	1.00	0.25	2.10	0.240
	21.40		0.037	0.018	0.118	0.020	0.003	0.053	0.257
	21-49		0.60	0.50	2.46	1.00	0.25	2.31	0.257
		1	0.046	0.013	0.130	0.020	0.006	0.054	1
16	49-88		0.75	0.37	271	1.00	050	2 22	0.284
			0.75	0.37	2./1 0.14F	1.00	0.00	4.33	
	88-120		0.037	0.022	0.145	0.022	0.006	0.060	0.308
			0.60	0.62	3.02	1.12	0.50	2.62	
	120-161		0.037	0.013	0.122	0.020	0.006	0.049	0.256
	120-101		0.60	0.37	2.54	1.00	0.50	2.14	0.250
		1	0.040	0.022	0.174	İ		İ	
	0-25		0.65	0.62	3.62				0.522
			0.03	0.02	0.102				
	25-50		0.045	0.018	0.185				0.550
49			0.70	0.50	3.82				
-	50-100		0.043	0.027	0.102				0.307
			0.70	0.75	2.13				
	100 150		0.043	0.018	0.092				0.275
	100-150		0.70	0.50	1.91				0.275
	0-25								0.352
12	25 50					1			0.352
12	23-30								0.400
	50-100								0.400 0.210 0.362
	0-25								0.362
17	25-50								0.272
	50-100								0.375
	20 100					1			01070
	0.05								0.477
_	0-25								0.477
36	25-50								0.328
	50-100								0.280
	0-25								0.300
37	25-50	1							0.270
5,	50-100	+	1	ł	ł	1		1	0.186
	50-100								0.100
	0.05								0.427
	0-25								0.485
38	25-50				<u> </u>	1			0.365
	50-100	1				1			0.290
	0.25	+	1	ł	ł	1		1	0.620
20	0-23								0.020
39	25-50								0.550
	50-100								0.425
	0-25								0.547
40	25-50	İ							0.448
.~	50-100	1	1						0.325
	50-100								0.323
	0.05								0.500
	0-25								0.500
41	25-50								0.420
	50-100				<u> </u>	1			0.380
		İ							
	0-25	1							0.522
10	25 50				l				0.322
48	25-50								0.4/5
	50-100								0.340
Heavy clay	ey, gray-meadow (o	<u>chlorin</u> ated	-sulfate)						
	0.22		0.043	0.018	0.115	0.020	0.004	0.056	0.294
	0-23		0.70	0.50	2.60	1.00	0.37	2.43	0.284
L									- I.

	23-52	0.043	0.018	0.128	0.020	0.004	0.057	0.282
	25 52	0.70	0.50	2.54	1.00	0.37	2.49	0.202
	52-94	0.046	0.022	0.112	0.017	0.003	0.057	0.268
22	52 )4	0.75	0.62	2.33	0.87	0.25	2.46	0.200
	94-123	0.040	0.018	0.118	0.017	0.004	0.054	0.265
	94-123	0.65	0.50	2.46	0.87	0.38	2.36	0.205
	123-165	0.043	0.013	0.117	0.020	0.003	0.052	0.259
	125-105	0.70	0.37	2.44	1.00	0.25	2.26	0.239
Heavy cla	ayey, gray-meadow (su	lphate)						
	0-23	0.043	0.022	0.228	0.035	0.009	0.082	0.431
	0-23	0.70	0.62	4.75	1.75	0.75	3.57	0.431
	23.50	0.043	0.018	0.199	0.030	0.009	0.070	0.370
	25-50	0.70	0.50	0.408	1.50	0.75	3.03	0.379
	50.07	0.040	0.013	0.186	0.032	0.004	0.067	0.256
	50-97	0.65	0.37	3.87	1.62	0.38	2.89	0.550
75	07.125	0.046	0.018	0.170	0.027	0.004	0.070	0.240
15	97-125	0.75	0.50	3.54	1.37	0.38	3.04	0.349
	105 160	0.043	0.013	0.155	0.020	0.006	0.064	0.210
	125-168	0.70	0.37	3.23	1.00	0.50	2.80	0.318
	0.05	0.049	0.018	0.166				0.407
	0-25	0.80	0.50	3.45				0.497
		0.046	0.013	0.150				
	25-50	0.75	0.37	3.12				0.450
29		0.049	0.022	0.133	1			0.465
	50-100	0.80	0.62	2.78				0.400
		0.046	0.018	0.123	1			
	100-150	0.75	0.50	2.57				0.370
		0110	0.00	2107				
		0.043	0.018	0.175				
	0-25	$\frac{0.013}{0.70}$	0.010	3.64				0.525
		0.046	0.018	0.140				
	25-50	0.010	0.010	2.91				0.418
74		0.046	0.013	0.112				
	50-100	0.010	0.015	232				0.335
		0.049	0.013	0.101				
	100-150	0.80	0.37	2.10				0.302
		0.00	0.57	2.10				
		0.043	0.022	0.172				
	0-25	$\frac{0.018}{0.70}$	0.62	357				0.515
		0.046	0.018	0.157				
	25-50	0.75	0.50	3.26				0.470
76		0.040	0.020	0.163				
	50-100	0.65	0.75	3.40				0.490
		0.046	0.018	0.129				
	100-150	0.75	0.50	2.68				0.386
		0110	0.00	2.00				
	0-25							0.602
26	25-50							0.550
20	50 100			1				0.350
	50-100				-			0.490
	0.25							0.425
07	0-23							0.433
21	23-30							0.310
	30-100							0.390
L	0.25							0.647
	0-25							0.647
28	25-50							0.588
	50-100							0.520
					ļ			
	0-25							0.495
65	25-50							0.530
	50-100							0.380
	0-25							0.460
68	25-50							0.360
	50-100							0.272
			1	1		1		
	0-25		1	1	ł	1		0.392
69	25-50		1	1	ł	1		0.315
	50-100							0.270
<u> </u>								
	0-25							0.365
70	25-50			1	<u> </u>			0.300
10	50 100							0.320
1	30-100		1	1	1	1		0.275

	0-25								0.590
71	25-50								0.450
/1	50 100							+	0.430
	50-100								0.270
	0.05							-	0.427
	0-25								0.437
72	25-50								0.505
	50-100								0.335
	0-25								0.352
73	25-50								0.310
	50-100								0.275
									0.590           0.450           0.270           0.437           0.505           0.335           0.335           0.335           0.335           0.335           0.335           0.335           0.335           0.310           0.275           0.562           0.520           0.482           0.512           0.380           0.285           0.325           0.250           0.285           0.325           0.285           0.285           0.280           0.210           0.245           0.275           0.280           0.311           0.314           0.275           0.269           0.282           0.304           0.262           0.230           0.230           0.245
	0-25								0.562
77	25 50							+	0.502
//	23-30								0.320
	30-100								0.430
	0.05								0.100
	0-25								0.482
78	25-50								0.512
	50-100								0.380
	0-25								0.285
79	25-50								0.325
	50-100	1				1		1	0.250
Heavy clay	ev. light grav-mead	low (chlorir	nated-sulfate)		I	1	I		
endy	, gray meat		0.046	0.036	0.120	0.017	0.004	0.069	
	0-23		0.75	1.00	2.50	0.87	0.38	3.00	0.310
			0.043	0.022	0.103	0.017	0.003	0.055	+
	23-48		0.013	0.62	221	0.87	0.25	2 41	0.263
			0.70	0.02	0.000	0.015	0.003	0.054	+
30	48-89		0.040	0.022	2.06	$\frac{0.013}{0.75}$	0.003	0.034	0.245
			0.03	0.02	0.112	0.75	0.23	0.062	4
	89-122		0.045	0.027	722	0.017	0.005	2.66	0.278
			0.70	0.75	2.33	0.015	0.23	0.061	4
	122-166		0.043	0.018	0.120	0.015	0.003	$\frac{0.001}{2.70}$	0.280
			0.70	0.50	2.50	0.75	0.25	2.70	
			0.040	0.025	0.100	0.020	0.004	0.062	_
	0-25		0.043	0.027	0.128	0.020	0.004	0.063	0.302
			0.70	0.75	2.66	1.00	0.37	2.74	
	25-54		0.046	0.022	0.135	0.020	0.006	0.062	0.311
	20 0 1		0.75	0.62	2.81	1.00	0.50	2.68	01011
63	54-91		0.046	0.018	0.146	0.025	0.004	0.061	0.314
05	54-91		0.75	0.50	3.04	1.25	0.37	2.67	0.514
	01 122		0.043	0.013	0.125	0.022	0.003	0.053	0.275
	91-122		0.70	0.37	2.60	1.12	0.25	2.30	0.275
	122 164		0.043	0.018	0.118	0.020	0.003	0.055	0.260
	122-104		0.70	0.50	2.40	1.00	0.25	2.41	0.209
	0.05		0.049	0.018	0.094				0.000
	0-25		0.80	0.50	1.96				0.282
			0.046	0.018	0.101				
	25-50		0.75	0.50	2.11				0.304
35			0.043	0.018	0.087				
	50-100		0.80	0.50	1.82				0.262
			0.043	0.013	0.078				
	100-150		0.80	0.37	1.63	1		1	0.235
		t				1		1	1
I			0.043	0.022	0.150	1		+	+
	0-25		0.013	0.62	3150				0.450
		<u> </u>	0.70	0.02	0.107	1		+	+
	25-50		0.040	0.010	777	1		1	0.320
61			0.75	0.30	0.000	1		ł	+
	50-100		0.040	$\frac{0.010}{0.000}$	1.07				0.270
			0.03	0.30	1.07	+		+	
	100-150		0.045	0.010	1.60				0.230
			0.70	0.50	1.00	+		+	
	0.25					+		<b></b>	4
	0-25					l		<b> </b>	0.410
31	25-50	Ļ						<b> </b>	0.410
	50-100					ļ		<u> </u>	0.320
	0-25								0.260
67	25-50								0.250
	50-100								0.245
Heavy clav	ey, light grav-mead	low (sulpha	te)		•		1		
		( <b>F</b> -2 <b>W</b>	0.040	0.027	0.138			Τ	
45	0-25		0.65	0.75	2.88	1		1	0.415
		1	0.00	0.70	2.00	1		1	1

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$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			0.043	0.022	0.158		
		25-50	$\frac{0.043}{0.70}$	0.62	3.30		0.475
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		50-100	0.046	0.022	0.184		0.552
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			0.75	0.62	3.83		
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		100-150	0.046	$\frac{0.013}{0.37}$	$\frac{0.176}{3.66}$		0.528
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			0.75	0.07	5.00		
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		0.25	0.043	0.018	0.177		0.520
$66$ $\frac{25.50}{50.100}$ $0.046\\0.75$ $0.018\\0.50$ $0.127\\2.65$ $2.98$ 0.382 $100.150$ $0.046\\0.75$ $0.075\\0.50$ $0.177\\2.65$ $0.177\\2.65$ $0.380$ $0.382$ $100.150$ $0.046\\0.75$ $0.018\\0.50$ $0.177\\2.43$ $0.000$ $0.380$ $32$ $0.25$ $0.75$ $0.018\\0.50$ $0.177\\2.43$ $0.000$ $0.375$ $32$ $0.25$ $0.000$ $0.000$ $0.000$ $0.000$ $0.000$ $33$ $0.25$ $0.000$ $0.000$ $0.000$ $0.000$ $0.000$ $33$ $0.25$ $0.000$ $0.000$ $0.000$ $0.000$ $0.000$ $34$ $0.25$ $0.000$ $0.000$ $0.000$ $0.000$ $0.000$ $44$ $0.25$ $0.000$ $0.000$ $0.000$ $0.000$ $0.000$ $0.25$ $0.000$ $0.000$ $0.000$ $0.000$ $0.000$ $0.000$ $0.000$ $0.000$ $0.000$		0-23	0.70	0.50	3.68		0.330
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		25-50	0.046	0.013	0.143		0.425
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	66	20.00	0.75	0.37	2.98		020
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		50-100	$\frac{0.046}{0.75}$	$\frac{0.018}{0.50}$	$\frac{0.127}{2.65}$		0.382
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			0.75	0.018	2.05		-
100010		100-150	$\frac{0.040}{0.75}$	$\frac{0.018}{0.50}$	$\frac{0.117}{2.43}$		0.350
$\begin{array}{c c c c c c c c c c c c c c c c c c c $							
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		0-25					0.425
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	32	25-50					0.375
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		50-100					0.402
$\begin{array}{c c c c c c c c c c c c c c c c c c c $							
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		0-25					0.165
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	33	25-50					0.186
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		50-100					 0.175
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		0.25					 0.612
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	24	0-25					0.612
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	54	50,100					0.328
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		50-100			-		0.423
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		0-25					 0.365
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	44	25-50					0.320
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		50-100					0.440
0-25         Image: Constraint of the system         Image: Consthe system         Im							
46         25-50         Image: Constraint of the system         Image: Constrate         Image: Constraint of the system <td></td> <td>0-25</td> <td></td> <td></td> <td></td> <td></td> <td>0.475</td>		0-25					0.475
50-100         Image: Constraint of the system         Image: Consthe system <thi< td=""><td>46</td><td>25-50</td><td></td><td></td><td></td><td></td><td>0.386</td></thi<>	46	25-50					0.386
0-25         0         0         0.582           60         25-50         0         0         0         0.500           50-100         0         0         0.528         0.528		50-100				1	0.245
0-25         0.582           60         25-50         0.500           50-100         0.528							
60         25-50         0.500           50-100         0.528		0-25					0.582
50-100 0.528	60	25-50					0.500
		50-100					0.528

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